

MICHIGAN FARMER

AND STATE JOURNAL OF AGRICULTURE.

The Only Agricultural and Live Stock Journal in the State.

VOL. XXXI.
No. 24.

DETROIT, SATURDAY, JUNE 12, 1897.

PRICE, 5 CENTS.
\$1 per Year.

Farm Department.

Conducted by J. H. BROWN, who lives on his farm at Climax, Mich., which is conducted as the Michigan Farmer Experiment Farm. All correspondence for this department should be sent to Climax.

THE EDITOR'S FARM NOTES.

THE WEATHER AND CORN PLANTING.

It is two weeks ago to-day that we commenced planting, or drilling in, our field corn. To-day it is just commencing to show above the surface.

We have had such cold wet weather for the last two or three weeks that farmers are fearful they shall need to re-fit and replant their fields. Some have already commenced this work.

We are more than ever convinced that it does not generally pay to plant corn "as early as possible." A few farmers in a neighborhood seem crazy to be the first ones to get their corn planted. This season has been no exception, and several are now enjoying the work of "planting in" or doing the work all over again.

EARLY PLANTING.

There are two objections to early planting, especially on heavy soil and sod ground. Continued cold weather is liable to cause the seed to rot, even between germination and the appearance of the sprouts above the surface. We have been afraid of this in our own case, though we did not commence planting until May 20.

On sod ground the seed planted early is in danger of cutworms. The seed itself is not injured, but the shoots are cut off just under the surface, and, if the seed is planted shallow, the shoot does not generally secure a healthy growth, if it lives at all.

STUNTED CORN.

If the plant is "stunted" at any time after germination, it seldom "makes up" for lost time. The effect, during the growing season, is very similar to that on a young pig that has been crowded out in a large litter.

OUR WORK SO FAR.

We have done all we could, so far, to give our corn a chance to do its best in growing another crop. The field is perfectly clean, and the soil fairly fertile. The mechanical condition is nearly perfect, several visitors stating that "it looks like a fine summer fallow."

As to the work so far: The horse weeder followed behind the drill, leaving the surface fine and smooth, and entirely effacing the drill marks.

The first heavy rain came four days after planting. Just as soon as it was dry enough, we thoroughly harrowed the surface with a sharp spike-tooth harrow, the teeth being kept in a vertical position and going crosswise of the drill rows.

Two days after another shower came on, and we followed with the harrow, the teeth being slanted one notch. We had hardly finished before another rain set in. Now the corn is coming through, the ground is wet, and yet not a weed is in sight.

Had it not rained we should have used the weeder next time. Now we shall first use the harrow, teeth slanted, then follow with the weeder. Thus the harrow and weeder can do the work perfectly until the corn is three or four inches high, then the cultivator will be substituted for the harrow.

TIME TO KILL WEEDS.

We have killed three "crops" of weeds since plowing, and expect to "electrocute" another crop before starting the two-horse riding cultivator. Our treatment has caused a goodly proportion of the weed seed in the upper two inches of surface soil

to quickly germinate, and these as promptly succumbed to our modern process of extermination in their incipency.

CULTIVATE DEEP FIRST TIME.

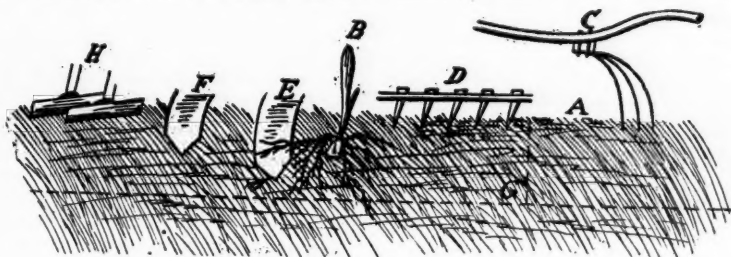
The first time over the ground with the cultivator we shall set the teeth to run as deep as practicable, in order to loosen up the soil for the tiny rootlets to ramify in every direction. As our treatment of the surface soil so far has caused the ground to pack, this deep cultivation, the first time over, is absolutely essential. No roots will be disturbed, and then all after cultivation will be level and shallow.

COMPARATIVE DEPTH OF TEETH WORKING IN CORN GROUND.

We have made a cut to illustrate, in cross section, the depth to which our various tools penetrate the surface soil after the corn is planted. We have tried, as nearly as possible, to show the comparative depth, by grouping all the various teeth used, in one sketch around a single plant.

The cut represents a section of soil. G is the bottom of the furrows, A the surface, and the vertical dotted line indicates the depth of the furrows, which is about seven inches.

B is a corn plant, showing the progression of both radicle and plumule when the shoot or stem is about four inches above the surface. We cannot vouch for the statement that this plant is drawn "true to life," for we had no corn plant large enough



COMPARATIVE DEPTH OF TEETH WORKING IN CORN GROUND.

to draw from. And even if we had, our artistic ability and esthetic taste is too crude to make a perfect drawing. However, our desire and hope is to draw out comments from our brother farmers on the subject.

C represents the horse weeder, in cross section, and D the spike harrow teeth. It will be noticed that the teeth of both weeder and harrow penetrate to the same depth. Both are shallow surface-working implements, unless weighted down, and neither tool will disturb the corn if the kernels are down at least one and one-half to two inches.

We find our seed deposited by the drill to a depth of three inches, on an average, and this is all right for our soil. So we find both weeder and harrow do a "world of good" for us, and do not disturb the corn, no matter what direction the operator drives his horse or team.

The continued use of these tools packs the soil down to the dotted line G, thus making it somewhat too compact for the tiny rootlets in their efforts to ramify laterally in every direction.

As soon as the corn is up high enough to cultivate good, we set the teeth of the spring-tooth cultivator to run about as shown at E, or four to five inches deep. Within a week, of good corn weather, following this first cultivation, the roots will occupy a goodly portion of the soil between the rows.

The next cultivation, if the spring teeth are used, will be as shown at F. After that, one to two inches is plenty for our clean soil.

The surface working cultivator blades

are shown at H. There are four of them, two each side the row of plants, and they cut over every square inch of ground between the rows. For general use, after one deep cultivation, the surface working blades should go hardly any deeper than shown at H.

On ground not too stony, the surface-working cultivator operates to perfection. It works on the same principle that a hand hoe does in the hands of an expert gardener. The blades run nearly flat, the rear edge slightly elevated, and the dirt, as it falls over the backs of the blades, is spread and leveled by the smoothing plates.

Our principal reason for using this style of cultivator is that we may kill June grass, and entirely eradicate any and all weeds and grass between the rows. For this sort of work a spring-tooth harrow or cultivator is comparatively worthless.

BARRACK QUERIES.

I have been thinking of building a cheap barn or shed for feeding sheep and have thought of building a barrack, as you described in the FARMER.

I think of putting sheds on both sides of it. How wide did you make yours? Will 2x6-inch oak do for the bill stuff? Shall use second growth white oak for the posts. What kind of lumber did you use for the roof? I think that I can brace mine and shingle it in a few years, if I continue to feed sheep. Please give me any pointers in regard to it, which will be thankfully received.

JACKSON CO. MICH.

FRANK A. RAY.

remedy. We have never seen such a [case].

The sample sent is orchard grass, and a good-sized one, too. If you have some of this grass in a permanent pasture, it is valuable for your stock, and you will appreciate it in due time. As you say, it is one of the earliest forage plants to grow in this latitude. It needs frequent clipping to utilize it in its best condition. It stands dry weather well, and is one of the best varieties to select in making a mixture of forage plant seed for a permanent meadow.

For the Michigan Farmer.

MAKING HAY.

In curing clover I would endorse about all that R. G. Palmer says in your issue of April 10, with the addition of some new suggestions.

I would prefer a bright, hot day, with the hay cut the evening before. Would not wait for the second day, if the next one after cutting is a good day. It can be put in the barn very green, and the more you have to put in one solid mass the better.

Don't scatter it around, but pack it down solid and keep the doors shut, except when hauling. Each load carries a large amount of heat in itself. Don't wait until two o'clock to let it get dryer, but commence an hour earlier and not draw after sunset. It gathers dampness and loses a great deal of heat. I think there is more hay harmed by getting too dry than by putting in too green.

It is possible to cut, cure and draw clover the same day, with the use of the tedder. If you anticipate that it is going to be fit to ted out at nine o'clock, rake at twelve or half past, commence hauling at one or half past; undoubtedly you would be safer to commence an hour earlier all the way around; for it is curing very fast while you are handling it. The main object, when you begin to rake, is to get it away from the sun as soon as possible, either in the bunch or barn. This is the time when you begin to loose the leaves.

Suppose the hay gets wet, what shall I do with it? Let it alone, no matter what the weather may be. Let it have time to drain out. Perhaps it will take two days, then it will open out with the majority of it in good color. Be sure and let the water dry off from it good. If you shake it out the next day after a rain it will perhaps get wet again. The sun and wind will blacken it and you will lose the leaves.

OAKLAND CO., MICH. WM. R. DREWATT.

For the Michigan Farmer.

GOOD YIELD OF POTATOES.

According to invitation I will try and give a short account of farm operations last summer.

In the first place it must be understood that our leading crop is potatoes. Last spring I planted three acres of potatoes on what is called here June grass sod (otherwise Kentucky blue grass), plowed the previous fall about seven inches deep.

In the spring I put a one-horse spring-tooth cultivator on it and dragged it twice over, then I put on an A spike-tooth harrow and dragged once lengthwise of the field, and once cornerwise, after which I marked it thirty inches apart each way.

Two acres I planted with Rural New-Yorker No. 2 seed potatoes, cut to one and two eyes to the piece, putting two pieces in each hill. The reason I cut some of the pieces with only one eye was they were so large that the seed would not go through the hand planter which I used in planting.

After planting I dragged them twice over with a spike-tooth harrow and cultivated

three times, twice one way and once the other. I had intended to go through them once more, but the tops got so large I could not do so.

I got from the two acres of the Rural New-Yorker No. 2, four hundred and twenty-four bushels of salable potatoes, after sorting out scabby ones and ones where the ends were out of the ground. The remainder of the ground did not do so well on account of grasshoppers.

Now, Mr. Editor, did you ever plant corn on potato ground, without plowing? If so, what was the result?

Did you or any of your readers ever try blinding corn stover with rye? If not I would say, try it. Cut when green it makes better blinding than marsh grass. I have tried marsh hay, and blinding with rye, and I think the latter the best. M. B. ASTRIM CO., Mich.

[You evidently made a success of your experiment in growing potatoes and secured a good yield. The Rural New-Yorker No. 2 is still our favorite, though we have not secured anything near your yield.]

Have never planted corn on potato ground, without plowing, and should generally prefer plowing. As to rye we have grown enough to last us for a long time. Have just been cutting rye out of one small field of wheat that contained rye last year. It is a nuisance on the farm where wheat is grown.

Rye bands no doubt are excellent, but we should prefer to use twine and let "some other fellow" grow the rye.—Ed.]

For the Michigan Farmer.

FENCES AND MATERIAL USED.

From C. F. Thayer's article in the May 22d issue of the MICHIGAN FARMER, and Editor Brown's comments thereon, I am led to think that the slat and wire fence is in bad repute in the Wolverine State.

Down here in Ohio this fence is regarded with favor, and, judging from the amount being constructed, many farmers look upon it as the "coming" and staying fence.

True, we have not had much experience with it, but little having been up for more than three years. Mr. Thayer says it will not stand the wind. Perhaps we do not have as much wind here in central Ohio, among the hills, as you do in Michigan.

The slat and wire fence is a neat looking fence when properly constructed; will turn pigs, chickens and all kinds of stock, and costs less to construct than most other kinds. We shall be greatly disappointed down here if it does not bear the test of time, and if experience causes us to "go back on it."

During the past March and April, the ground being too wet to plow a good part of the time, we spent several days building fence of the post and rail style. Our posts were got out seven feet in length and put in the ground from two and one-half to three feet.

This fence takes the place of the old-style "worm" fence. New posts and stakes were used and the rails from the old fence. The stake rests on the stone placed beside the post, which stone also serves as a rest for the bottom rail. These stakes are four to four and one-half feet long and are wired to the posts. This makes a very good fence, looks well and occupies but little ground.

We have about fifty panels along the public roadside and about one hundred and twenty-five panels elsewhere. If good posts are used and care is taken in constructing, it should stand a long time without repair.

In building this kind of fence along a hillside, the rails should always be placed to the upper side of the posts. If placed on the lower side, so much weight will tend to pull the posts and fence over.

I must tell the reader about the new fence around our dwelling, which we have nearly completed. The old one was a great eyesore for many years, had been up (and down) for forty or fifty years and was a little out of date. But it is now a thing of the past, existing only in the imagination of the many passers by.

We are proud of the new fence and think it a "thing of beauty" and trust it may be a joy for some years to come. There is nothing fancy about it, and the reader may think our ground for pride or satisfaction not well founded.

The fence is post and board. The board next the ground is eight inches wide, the second board from the ground is seven inches, the third six inches and fourth board four inches.

A five-inch "cap" is used to cover tops of posts, and keep them in line. This cap adds one inch in width to the top (fourth) board, making it appear to be five inches, instead of four, when viewed from a distance. Hence the variation in width of boards from bottom to top is uniform and gradual. It is 8, 7, 6 and 5 inches respectively. The posts are 6x6 inches at the butts, and 6x2 inches at the tops, a post every six feet.

The bottom board is three inches from the ground. The second and third spaces three inches, and the next (top) space five inches. This makes the fence three feet four inches high. The spaces are so arranged, we think, as to keep the chickens from getting through into the yard. If they get into the yard they must fly over.

Now, readers, how do you like our fence? How does it strike the editor? The boards are red oak and the posts white oak. Some say red oak does not make a lasting board. KNOX CO., Ohio. FRANK LESLIE.

[There may be some of the closely woven slat fence that proves satisfactory in the long run, but we have not seen it.]

Some sections built a few years ago, running east and west, and seldom used for the

purpose designed, that of restraining stock, can be found in this locality that still presents a fairly creditable appearance. But those sections that run north and south, and were compelled to restrain stock for one or more seasons, now present a cross between a fence and a disordered phalanx of ancient Grecian hoplites in battle array.

The greatest trouble is caused from the racking of the panels, between the posts, by the winds. This style of fence presents so much surface to the wind that the line wires are constantly bending and straining in the staples on the posts. Sooner or later the wires break at the point where they pass through the staples and the fence is ruined.

To be of any material benefit in restraining stock the line wires should be kept tight. But with broken main wires, accompanied by broken pickets, we find one of the poorest fences ever built. The best slat and wire fence, as we find it, consists of eight or ten main wires with pickets or slats enough between each of the posts to keep the wires parallel, or in proper position under any strain.

Friend Leslie has a good fence in the post and board style. In fact, some of this style of fence, after twenty years' use, we find in excellent condition. Of course it has been necessary to put in a new set of posts, but few fences can beat the post and board style, if good material is used. At present it is doubtful whether one could build a post and board fence on the farm as cheaply as one of wire.—Ed.]

For the Michigan Farmer.

REVERSE THE PRESENT ORDER OF THINGS.

I wish some wheelbarrow manufacturer would build one that the body turns thus: Have the body run opposite to its present build, so the workman can stand between the handles and shovel out, say manure, etc., either side equally well.

Also wish the pump manufacturers would elevate instead of depressing the spout, so water would at once cease dripping, and freezing—in winter—on the platform. E. LOVEJOY.

VAN BUREN CO., Mich.

[All right, just write to some manufacturer or machinist, who is a good wright, and ask his opinion. We like the idea regarding the wheelbarrow, for certain kinds of work. But we could not look at the pump in the same way, if the spout was reversed, without reversing our present position.—Ed.]

For the Michigan Farmer.

LUPINES.

In answer to A. J. Y., of Rockford, Mich., I will say that the yellow lupines are sowed a good deal in north Germany, on sandy land. I have seen lupines grow on land that was so poor it never would grow a green weed all summer.

Lupines cannot be sowed with rye, the same as clover; they are sowed in spring by themselves, and plowed under when in full bloom for fall rye. Wheat don't grow well on sandy land in Germany.

The seeds grow in pods the same as beans; the pods are in a cluster on top of the plant. We used to go through with a knife and cut the tops off for seed. Spread on a sheet outside and the sun will thresh them. They cannot be mowed as other grain, as the sun would thresh them before they could be gathered up.

About twenty years ago I sowed a quart of lupine seed in western Pennsylvania. Three plants only came up and they died when about three inches long; first, the seed was no good, second, my land was not sandy enough.

I got the seed in New York, paid 50 cents a quart. I forgot the address. We used to feed the seeds to sheep in small quantities. Some have it ground with oats and rye for horses. It is the best plant I know of for green manuring. If I had sandy land I would give it another trial. CHAS. FUELLGRAF. OAKLAND CO., Mich.

For the Michigan Farmer.

LOCATION OF POWER WINDMILL.

Being interested in the article on power windmills by W. W. Seeley, would say I have had about the same experience for several years. Have erected power windmills in all shapes, and will agree with Mr. Seeley that there is no way of erecting equal to the mast on barn, with tower above roof, and the tower should be shingled to avoid leakage.

The main object of a mast is to keep the shafting always in line, with all weight on foundation of barn. I always recommend placing them on barn as I find there is as much gained in cutting fodder as in grinding grain.

I have had a 12 foot steel power mill for seven years, being one of the first steel power windmills in use and the first in Ingham Co. In this time my mill has ground over 700,000 pounds of grain, besides cutting fodder, sawing my wood and pumping water from a rock well 140 feet from the mill. This was doubted by some of my neighbors until they saw it work. It will work equally as well 500 feet away, if the water is not more than 20 feet from the surface.

Now about the foot gear; it is all right with plenty of power, but with a 12-foot wheel and our average winds the fewer bearings the better, for every bearing adds friction. With my experience of erecting

about 40 power windmills, I find that a grinder attached directly to bottom of shaft, with safety clutch, above grinder, excels all other devices of using wind power.

About the height. It is the greatest trouble I have to convince the farmers that they cannot get their mills too high. To be sure, there is a limit, but 15 to 20 feet above all obstructions within a radius of 400 to 500 feet, insures more safety and better results in power.

Regarding the price of a power windmill outfit, \$125 will place an outfit complete for grinding, elevating and cutting fodder. I will say, from my own experience and many others, that no farmer can invest \$15 to \$125 to better advantage. Let us hear from others. C. H. JAMES. INGHAM CO., Mich.

[We recommend erecting on a barn if possible, and shall erect one on our own barn very soon. It will be a 16-foot steel wheel and steel tower.]

A change in our creamery has made it necessary to utilize the grinding room for the boiler or steam heater and separator. So we shall use the geared mill to run the grinder, sheller, etc.—Ed.]

For the Michigan Farmer.

PLOWING UNDER BUCKWHEAT.

I notice in the FARMER of May 15, an article inquiring about sowing rye to plow under for summer fallow. I have sown buckwheat for that purpose, with good results.

As soon as corn is planted I plow the ground and harrow and roll thoroughly, then drill one bushel of buckwheat to the acre.

When in full bloom, plow under, using a chain on the plow. Do not sow broadcast, as it will pull up when plowing under. My soil is a clay loam. J. F. KOHN. IONIA CO., Mich.

For the Michigan Farmer.

A PUMP COUPLED TO A SPRING.

In the FARMER of May 8th "Reader" asks about tapping a spring fifty rods away to supply his windmill pump, and wants to know if it will work. The Editor refers it to readers who have had experience for answer.

If the pipes are put together "air tight" it will work perfectly. The horizontal distance has nothing to do with it. It will pump the same as though the pipe went straight down into a well eight feet deep.

If the spring is only eight feet below the pump cylinder, it would work equally well if spring was 25 feet below pump. We would suggest that a little white lead, in paste form, be used in putting the pipe together and that the job be tested before filling the trench. It must be absolutely air tight, to insure perfect work.

We speak from practical experience, having for several years done a general well and windmill business in connection with general hardware, manufacturing and farming.

We like friend Bunnell's suggestions about strengthening old windmill derricks. Many farmers have had their mills go to pieces just from lack of proper care. There is no machine on the ordinary farm that pays so well, or does so much work for the money invested. It works every day in the year, with possibly a few exceptions, and with very little looking after.

When a cyclone or hurricane goes through a community and lays low a half dozen or so mills, the windmill man has business galore, for no farmer who has used one will go without very long. CALHOUN CO., Mich. F. E. STRONG & BRO.

[We shall be glad to hear from you again. Many farmers do not understand the pump business thoroughly. Write us a short article, please, on the principle of pump construction and operation. We are frequently asked to select a pump for a certain purpose. Some dealers do not take pains to supply the farmer with the kind of pump and cylinder most needed for perfect work.—Ed.]

THE SEASON IN FRANCE.

From our Paris Correspondent.

PARIS, May 29, 1897.

The Ides of March were watched with apprehension at Rome. In France, the Ides of May—from the 11th to the 14th—are a source of anxiety from time immemorial. They are better known as the "Ice Saints' Days." Their advent was too often justified, and perhaps never more so than the present season. The disasters caused by something more than a white frost, have produced consternation over all France, both in the agricultural and vineyard regions. The young shoots of vegetation gorged with sap or water, and hence most sensitive to a sudden fall in temperature, have been in the course of a few hours either partially or wholly destroyed. The total losses have not yet been estimated, but they must be enormous. Kitchen gardeners and fruit-growers have been reduced to misery in a vast number of cases. But vineyards have been compromised in the center and east of France especially; indeed, in some regions the grape harvest is wholly lost. Worse, the measures generally resorted

to in order to beat off the Ice Saints have wholly failed this year. These measures lay in the production of smoke, by the burning of vegetable substance on the surface of the soil. But the protection of young vegetation against spring frosts by means of artificial clouds, the result of combustion, is very ancient. Pliny recommends it in his Natural History; the Peruvians practiced it before the arrival of the Spaniards, and Boussingault, on his return from South America, recommended vine farmers to adopt the protection. The treatment for the bitten vines, apples equally well for fruit trees; dig around them, manure them, and do not spare fertilizers. Infuse strength into them, for though they are the foliaceous parts of the trees that have been injured, care must be taken not to allow the effect to re-act on the wood, and so compromise next season's yield. The mixture employed in the Rhinish provinces by fruit-growers and vine farmers consists of nitrate of soda and sulphate of ammonia, nitrate and phosphate of potash; the first two in the proportion of three-tenths each, and the second two one-fifth each.

At the present moment the only crop that shows well is winter-sown wheat. The spring-sown cereals have had to struggle against a cold seed bed, spells of wet and of drouth, snatches of scorching sunshine, and cutting winds apparently from all quarters. The main potato crop does not seem to have been much affected. As a rule it was, as it ever is, planted late; the soil is specially cured for the more than ever pet esculent—at once remunerative for direct sale, cattle feed, fecula making, or distillation. By curing the soil is meant autumnal plowing, cleaning and dunging—15 to 20 cartloads per acre, the complementary fertilizers being applied in spring. Professor Deherain has not convinced farmers that to plow land in autumn and expose it as naked fallow throughout the winter, is merely helping the rain to wash out its nitrogen. Farmers have experienced the advantage of lessening the work of soil preparation in spring by executing a portion of it in autumn. Nitrogen in the form of nitrates is now cheap. To leave the land in stubble, or to skim-plow it and sow a green crop to form a top coat for the soil, and to be plowed under in spring, has not many admirers. In Germany it is different.

The early potato crop is very satisfactory; this remark does not apply to supplies from Algeria, that arrive in hogheads, heavily coated with red clay, generally small in size, and lacking taste. They generally grip the market from the close of January till the end of March. Then the Kidney varieties from the South and Southwest of France make their appearance, as at present. They are relatively large, some quarter of an ounce weight; size has nothing to do with the price, big or small as marbles, they sell at four sous the pound retail, or 20 francs per cwt. These potatoes are never employed boiled, they are always cooked in grease, save what few may be employed in hashes or ragouts. In no case has there been the slightest symptom of disease. Pastures where allowed to thicken or bottom, promise well, and if barns will not be full of corn this year, they will be of hay.

In some places in Southern Michigan, along the Michigan Central and Grand Trunk railways, we find wheat looking thin, and not so well as two weeks ago. Some fields are infested with insects. The weather has been bad for wheat lately, and some farmers are beginning to worry over the prospects. Hardly a field can be found that does not contain rye. Yesterday we saw many farmers out clipping off the stalks of scattering rye. We hope all have read the editorial in the last issue. The season is late and farmers will soon be rushed with work. Very little corn is up high enough to cultivate. Grass is looking well in places, while some meadows are almost a solid mass of sorrel, especially on sandy soil.

From Foot to Knee

Ohio Woman Suffered Great Agony From a Terrible Sore—Her Story of the Case, and Her Cure.

"For many years I was afflicted with a milk leg, and a few years ago it broke out in a sore and spread from my foot to my knee. I suffered great agony. It would burn and itch all the time and discharge a great deal. My health was good with the exception of this sore. I tried a great many kinds of salve, but some of them would irritate it so that I could hardly stand it. I could not go near the fire without suffering intensely. Some one sent me papers containing testimonials of cures by Hood's Sarsaparilla and I told my husband I would like to try the medicine. He got me a bottle and I found it helped me. I kept on taking it until my limb was completely healed." MRS. ANNA E. EAKEN, Whittlesey, Ohio.

Hood's Sarsaparilla

Is the One True Blood Purifier. All druggists. \$1; six for \$5. C. I. Hood & Co., Lowell, Mass.

Hood's Pills are purely vegetable, reliable and beneficial. 25 cents.

Live Stock.

THE BOYDEN SALE OF SHORT-HORNS.

According to announcement, the closing-out sale of the Springbrook herd of Short-horns took place on Thursday of last week. The attendance was remarkable, considering the weather, which was rainy and cool. There were parties present from a dozen counties, many of them once interested in Short-horns, and very much tempted to dip in again. The number of bulls wanted could not be furnished, and many left disappointed on this account. A dozen or two of bulls fit for service would have been taken at good prices. Only one old enough was on sale, and he brought \$245. The others were mere calves, Mr. Boyden having such a demand the past winter that he was cleaned out. Mr. C. C. Judy, of Illinois, did the selling in a very acceptable manner, and kept things moving lively until everything was closed out. The highest priced female went to Dr. A. W. Wright, of Alma, for \$245, and the yearling Cruickshank bull went to John Lessiter & Sons, of Cole, at the same price. He will be kept at the head of the Lessiter herd, which is all Scotch bred. In referring to the bulls used in the Boyden herd, by some mistake the Scotch bull, Brilliant 124013 was omitted. A great many of the animals sold were by him, and it should be stated that he was bred by John Lessiter & Sons, sired by Golden Beau 86736, and out of Mina Cole by Knight of the Garter 93260. Brilliant's stock are all great feeders, and show great quality and substance.

The cattlemen present, and there were many veterans, spoke in the highest terms of the quality of the cattle offered. All were in fine condition, not carrying too much flesh, and should do well wherever proper care is given them. The sale footed up a total of \$5,900, or over \$120 per head, including young calves and everything, the best sale made in this State since 1890, and an earnest of the better times in prospect for the breeders of good cattle. The list of animals sold, names of purchasers and prices paid are given below:

FEMALES.

Gloster of Springbrook 5th, by Brilliant 124013, dam Gloster of Springbrook 3d, R. H. Evans, Detroit, \$75.
Maud B, by imp. Baron Barringtonia 96060, dam Lady Maud 3d, by Lord Compton 46471, H. Laraway, Emery, \$95.
Heifer calf of above, calved March 25th, '97, by Volunteer 101205, E. B. Sears, Ann Arbor, \$35.
Duchess of North Washtenaw 8th, by Crimson Knight 2d, 124989, dam Duchess of North Washtenaw 2d, by Loudon Duke of Hildaway 4th 87763, H. Schaun, Dutton, \$80.
Nonpareil of Springbrook 4th, by imp. Baron Barringtonia 96060, dam Nonpareil of Springbrook 2d, by Lord Hilpa 63417, J. Lessiter & Sons, Cole, \$115.
Duchess of North Washtenaw 9th, by Crimson Knight 2d 124989, dam Duchess of North Washtenaw 6th, by Crimson Knight 114888, E. A. Cole, \$90.
Barringtonia Mary of Springbrook, by imp. Baron Barringtonia 96060, dam Mary of Springbrook 2d, by imp. Baron Barringtonia 96060, with bull calf by Volunteer 101205, J. N. Stone, Newaygo Co., \$150.
Reciprocity of Springbrook, by Brilliant 124013, dam Reciprocity, by Plum Knight 99975, C. Bowditch, Hillsdale, \$110.
Duchess of North Washtenaw 2d, by Mazurka Lad 89007, dam 3d Duchess of Hamburg, by Renick Wild Eyes 64189, Agricultural College, \$95.
Canadian Duchess of Gloster 12th, by Sales Duke 2d 113659, dam Canadian Duchess of Gloster 11th, by Athelstane 7th 65067, D. S. Norris, \$80.
Maud's Brilliant Mary, by Brilliant 124013, dam Maud B, by imp. Baron Barringtonia 96060, W. J. Bartow, East Saginaw, \$115.
Lady Maud 3d, by Lord Compton 46471, dam Lady Gay, by 15th Duke of Hillsdale 16329, J. R. Bills, Marshall, \$40.
Roan heifer calf of above, by Earl of Springbrook 124015, J. A. St. John, Utica, \$40.
Airdie of Springbrook, by imp. Baron Barringtonia 96060, dam Airdie of Springbrook, by Lord Hilpa 63417, W. Blodgett, \$125.
Gloster of Springbrook 6th, by Volunteer 101205, dam Gloster of Springbrook 3d, by imp. Baron Barringtonia 96060, H. T. Phelps, Ann Arbor, \$80.
Belle Beauty of Springbrook 2d, by Lord Hilpa 63417, dam Belle Beauty of Longwood 2d, by 4th Duke of Springfield 86006, Wm. Ball, Hamburg, \$110.
Red heifer calf of above, by Volunteer 101205, J. N. Stone, Newaygo county, \$40.
Reciprocity of Springbrook 2d, by Brilliant 124013, dam Reciprocity, by Plum Knight 99975, A. W. Wright, Alma, \$150.
Duchess of North Washtenaw, by Loudon Duke of Hildaway 4th 87763, dam 3d Duchess of Hamburg, by Renick Wild Eyes 64189, R. H. Evans, Detroit, \$75.
Nonpareil of Springbrook 2d, by Lord Hilpa 63417, dam Nonpareil 4th, by Statesman 1st 54204, Eugene Fifeid, Bay City, \$80.
Nonpareil of Springbrook 6th, by Brilliant 124013, dam Nonpareil of Springbrook 3d, by Lord Hilpa 63417, Pacey & Smith, Dexter, \$130.
Duchess of Springbrook 4th, by imp. Baron Barringtonia 96060, dam Duchess of Springbrook, by Duke of Crow Farm, Wm. Ball, Hamburg, \$150.
Roan heifer calf of above, by Volunteer 101205, Wm. Ball, Hamburg, \$70.
Mysie of Wheatfield 3d, by Welcome Lad 78374, dam Mysie of Turlington 2d, by Violet Knight 78287, A. W. Wright, Alma, \$180.
Gloster of Springbrook 5th, by Brilliant 124013, dam Canadian Duchess of Gloster, by Sales Duke 2d 113659, A. W. Wright, Alma, \$175.
Duchess of North Washtenaw 6th, by Crimson Knight 2d 114888, dam Duchess of North Washtenaw, by Mazurka Lad 89007, W. J. Bartow, East Saginaw, \$135.
Duchess of North Washtenaw 11th, by Crimson Knight 2d 124989, dam 5th Duchess of North Washtenaw, by Mary's Double Duke 8728, Eugene Fifeid, Bay City, \$45.
Mysie of Wheatfield, by Commander-in-Chief 47714, dam Mysie of Turlington 2d, by Violet Knight 78287, T. M. Southworth, Allen, \$125.
Vol's Royal Mysie, by Volunteer 101205, dam Mysie of Springbrook, by imp. Baron Barringtonia 96060, J. H. Brown, Kalamazoo county, \$125.
Duchess of North Washtenaw 10th, by Crimson Knight 2d 124989, dam Duchess of Washtenaw, by Loudon Duke of Hildaway 4th 87763, R. Walton, \$55.
Nonpareil of Springbrook, by Commander-in-

Chief 47714, dam Nonpareil 4th, by Statesman 1st 54204, Eugene Fifeid, Bay City, \$140.
Golden Leaf, by Spartan Hero 77932, dam Golden Roan, by Knight of the Rose 23646, Wm. Ball, Hamburg, \$155.
Gloster of Springbrook 3d, by imp. Baron Barringtonia 96060, dam Canadian Duchess of Gloster 11th, by Athelstane 7th 65067, A. W. Wright, Alma, \$245.
Lady Belle of Springbrook 2d, by imp. Baron Barringtonia 96060, dam Lady Belle 5th, by Barrington Duke 37622, Eugene Fifeid, Bay City, \$90.
Lady Belle of Springbrook 3d, by Volunteer 101205, dam Lady Belle of Springbrook 2d, by imp. Baron Barringtonia 96060, Eugene Fifeid, \$75.
Duchess of Webster 3d, by Crimson Knight 2d 124989, dam Duchess of Webster, by Lord Hilpa 63417, W. Blodgett, Ann Arbor, \$65.
Rose of Ashland, by 79th Duke of Goodness 65786, dam 3d Rose of Ashland, by Roan Duke of Oxford 64223, Eugene Fifeid, Bay City, \$65.
Mysie of Springbrook, by imp. Baron Barringtonia 96060, dam College Mysie, by Fennel Duke 2d of Sideview 69331, Eugene Fifeid, Bay City, \$170.
Mary of Barrington, by imp. Roan Barringtonia 96060, dam Mary of Springbrook, by Commander-in-Chief 47714, A. R. Smith, \$30.
Mary of Springbrook 2d, by imp. Baron Barringtonia 96060, dam 10th Mary of Holmhurst, by Red Erick 40548, W. J. Bartow, East Saginaw, \$95.
Mary of Springbrook 3d, by Volunteer 101205, dam Mary of Springbrook 2d, by imp. Baron Barringtonia 96060, Eugene Fifeid, Bay City, \$50.
College Mysie, by Fennel Duke 2d of Sideview 69331, dam Mysie 4th, by 5th Duke of Acklam 41734, Eugene Fifeid, Bay City, \$150.
Alexandrina C, by Lord Mysie 104121, dam Alexandrina of Cedar 7th, Gen. Garfield 41958, T. M. Southworth, Allen, \$150.

BULLS.

Roan Champion, yearling, by Banner Bearer 11793, dam Golden Leaf, by Spartan Hero 77932, John Lessiter & Sons, Cole, \$245.
Duke of Macomb, by Gloster of Macomb (Vol. 49) dam Dairy Rose, by Gloster's Airdie 86727, W. Blodgett, Ann Arbor, \$85.
Roan bull calf, unnamed, (Vol. 42), by Volunteer 101205, dam Mary Barrington, by imp. Baron Barringtonia 96060, A. R. Smith, \$80.
Red bull calf, unnamed, (Vol. 42), by Volunteer 101205, dam Alexandrina C, by Lord Mysie 104121, W. J. Bartow, East Saginaw, \$70.
Crimson Sharon, (Vol. 42), by Crimson Knight 2d 124989, J. J. Shearer, Plymouth, \$70.
Red bull calf, unnamed, (Vol. 42), by Duke of North Washtenaw (Vol. 42), dam Nonpareil of Springbrook 2d, by Lord Hilpa 63417, Wm. Campbell, Ann Arbor, \$50.

A WORD ABOUT THE LEICESTER.

To the Editor of the Michigan Farmer.

Enclosed find sample of wool from my flock of Leicesters. I bought four ewes with which to start my flock in 1892, and since then they and their progeny have dropped 45 lambs, and I have not lost a lamb, nor had one that had to be helped in any way. Have got lambs now that are less than three months old and weigh from 66 to 73 lbs., without any grain or crowding. Their feed during the winter has been corn-stalks once a day, four quarts oats once a day, bean pods once a day, with plenty of good well water, to eighteen sheep, and they came through in splendid shape, and are the admiration of my neighbors. I sheared the second week in April, and they averaged 9 lbs. 6 oz. per head. J. M. PARK, Eaton Co., Mich.

The sample of wool sent is of good quality, with an eight-inch staple, lustrous, and with the greyish tint which is natural to the Leicester fleece. It is a distinguishing characteristic inherent in the breed, and when once studied its presence can be detected in the fleece of other sheep with which the Leicester may be crossed. The Cotswold fleece is a dead white, and the Lincoln nearly so if pure. Both these are lustre wools, and to an ordinary observer appear to be the same as the Leicester. But the difference is radical between the Leicester and Cotswold under the glass, the fibre of the Leicester being clear all the way through, while a dark streak, like a vein, pervades the Cotswold. This peculiarity, which does not affect the wool in any way, can be traced in the fleece of any sheep in which there is any Cotswold blood. It is to be found in the Oxford Down, which contains Cotswold blood, but is not so apparent as when the breed was first started. The Leicester (pronounced Lester) was the first breed of English sheep which passed under the hands of a scientific breeder, and was subjected to a systematic course of breeding as a means of increasing its value and usefulness. In fact, Mr. Bakewell's work was the first effort made in modern times to improve our domestic animals. His methods blazed the way for the early improvers, and they have been followed more or less closely up to the present time. He took the Leicester sheep, a coarse, flat-ribbed, long-legged race, slow feeders and with a coarse, light fleece of wool of little value. By selection, by close inbreeding, the results of which were closely watched by slaughtering the animals and examining their internal organs, he succeeded in giving the Leicester an ideal form for the production of meat, a smooth, symmetrical carcass, with the straight lines, the broad back, long quarters and square form recognized everywhere as the type of the quick feeder, and the producer of the highest quality of meat. The improvement of its carcass brought about an improvement of the Leicester's fleece. It became fine and silky, the fibres lustrous, even and strong. The evolution of the improved Leicester marked the beginning of that system of improvement in domestic animals which has made England the home of pure-bred live stock and eliminated the scrub from within her borders. It was the success of Bakewell with the Leicester which yet keeps all civilized nations paying tribute to the skill of the English breeder.

The Leicester has not enjoyed much popularity in this State. When first introduced the Merino was the popular breed, and when mutton rather than wool was wanted, the Down breeds seemed to strike the farmers as better suited for their re-

quirements. But the blood of the Leicester had a potent influence in the improvement of other breeds in its native home. The Shropshire and the Hampshire are both indebted to it, and the finer form of the improved Lincoln is also due to its ameliorating influence. We know of but one pure bred flock of Leicesters in this State besides our correspondent's, and it is that of A. F. Wood, of Mason. It was started over 30 years ago, and been bred pure and to a high standard ever since. There is one thing we would like to call the attention of owners of long-wool flocks to, and that is the absolute necessity of feeding them so that chaff, seeds, etc., do not get into their fleeces. Their wool is open, and holds such stuff, to the great deterioration in value of their fleeces. There is no way in which it can be got out of the fleece except by hand-picking, a very costly process, and buyers therefore must discriminate heavily against such fleeces. It will require some care in feeding to keep their fleeces free from such matter; hay should be fed in racks which will prevent them getting more than their heads into them, and it should never be thrown down on them. Neither should they be allowed to run to a straw stack. Hay should be placed in their racks while they are in the yard, and the bedding changed frequently enough so that their wool will not become soiled. Under the new tariff schedule there will be a largely increased demand for coarse combing or brail wools, and the owners of long-wool flocks should be taking means to increase their flocks as fast as possible, so as to meet this demand.

A WORD FOR THE MERINO.

To the Editor of the Michigan Farmer.

I have been a reader of your paper for a number of years and think it is the most valuable one that the farmer can read. And as I always look for the practical experience of farmers in your paper, and believe that others do the same, I will give you mine on raising fine wool sheep.

There are but very few fine wool, or Merino sheep, left in this part of Lapeer county; but still I think they are the most profitable of any breed that the farmer can raise. If he will keep an account of what it costs to maintain them, and then compare it with the other breeds, I believe it will satisfy him that I am correct.

Last winter I had 42 at one barn from the first of December until the first of April, and they cost me less than \$8 to winter them (except what straw they ate, and I think the manure will pay for that), and they were wintered in good shape, as you will see from the amount of wool they sheared as recorded below: I wintered 103 sheep in all, and sheared them May 3, 4 and 5, and the 103 gave 1,634 lbs. of wool. I sold it at the Peters Woolen Mill in Columbusville, 1,185 lbs. at 11c, 238 lbs. at 9c, and the balance at 8c per lb. Have also sold 20 two-year-old wethers and some old ewes that did not breed this year, for \$25 each. Some say that the drovers won't buy the Merino, but they seem glad to get them when they can find those that are fit for mutton. I think this is a very good showing for a flock of 103 sheep, and there is as much profit in them as there is in any other branch of farming that a man can enter into, if you take everything into consideration. T. B. HOUGH, LAPEER CO., Mich.

EPIZOOTIC ABORTION IN COWS.

A committee appointed by the Royal Agricultural Society of England, to investigate the matter of epizootic abortion in cows, have had the subject under advisement for a long time, and have taken the best advice, both scientific and practical, to be obtained. They have issued from time to time, in the form of brief statements, or leaflets, the conclusions reached and the treatment recommended. Only those who have had an experience with this disease, which frequently appears in breeding and dairy herds, and causes severe losses to the owners, can appreciate the importance of this subject. While we have had some experience with it in this State, the dairy districts of New York and Massachusetts have in years past met with disastrous losses from this disease. An ordinary case of abortion in a herd may develop into large proportions through sympathetic affection on the part of the other animals. The utmost care should therefore be taken, through the use of disinfectants and entire cleanliness, to stop any spread of the disease. The last leaflet issued by the committee referred to above is as follows:

Since the issue of the first leaflet on this subject three years ago, further inquiries have added to the evidence which had been previously brought to the notice of the society in reference to the contagious nature of epizootic abortion in cows.

It is therefore considered necessary to urge stock owners, in whose herds abortion occurs from time to time in the epizootic form, to deal with the disorder as they would with foot-and-mouth disease or any other contagious malady, i. e., by isolation of the cows which have suffered, by burning the expelled foetus and membranes in quicklime; and by regular and thorough cleansing and disinfection of the premises and also the cows, both healthy and diseased, which are kept in the sheds.

It should not be forgotten that a thorough washing with water is an essential part of any system of disinfection, after

which a strong solution of blue vitriol (sulphate of copper), or carbolic acid, one part, to water, fifty parts, may be used.

Disinfectants are of various kinds: carbolic acid and other tar products, sulphate of copper, and corrosive sublimate (mercuric chloride) are in common use for the purpose.

For the cows the disinfecting solution should be applied to the under part of the tail, the anus, vulva and parts below.

SHORTHORNS IN ENGLAND.

The last number of Thornton's *Short-horn Circular* completes the record for the year 1896, and affords interesting reading for all those who like this breed of cattle. According to the figures given in the *Circular*, the trade showed a steady improvement during 1896. It says that in 1895 there were thirty-seven sales, at which 1,624 head of cattle were offered, the total amount realized by the sales being £43,331 7s. 3d., or an average of £26 13s. 7d. (£133.40). This, it will be remembered, was a move in an upward direction, and was thought a healthy sign. Last year, however, the rise in values was more than maintained. There were only thirty-three sales, but at these sales seventy-nine more cattle were offered, a total of 1,703, the amount realized being £49,093 5s. 6d., or an average of £28 16s. 6d. (£144.12) an increase in the average of £2 2s. 11d. (\$10 72). The collective bull sales have also left as good a result as the private ones. Taking the four principal collective sales we only find in one instance that there is a substantial decrease in the average of 1895. At Perth there were 149 bulls sold last year at an average of £26 15s. 6d., against the average of £21 12s. 8d. for 137 in 1895. At the first sale at Birmingham 249 bulls were sold at an average of £38 11s. 1d., against 206 at an average of £34 3s. 10d. in 1895. At the second Birmingham sale the average of 1895 was not reached. Last year 123 were sold at an average of £27 8s. 3d., whilst in 1895 87 were sold at an average of £33 14s. 10d., but there was an increased volume of trade, which made up for the falling off on this occasion.

Upon the whole there is a decided improvement shown in the demand for Short-horns on both sides of the Atlantic, and it is quite apparent that the business of breeding them will again, if it is not now, prove remunerative. It is on a foundation of individual excellence as well as good breeding, the only safe basis for the breeder, as well as those who keep cattle for their productive value.

There is a big compliment for the Berkshire hog in the following item from a Chicago journal's live stock market report: Simon O'Donnell is bracing himself up over a sale of a load of prime Berkshire hogs he had consigned to his house last week. They were bred and raised by W. M. Hinsdale, Onawa, Iowa, and were pronounced by such observers, buyers and experts as Everett St. John, George Nichols and Charles Goepfer, all of them in the business from 18 to 20 years, as the best load of hogs, the best one lot of Berkshires, or any other breed, that they ever had a chance to see or overlook. There were 56 head, averaged 332, were solid, broad backed, light bellied, and moved off much like a pig that would not average over 250. As a matter of course they sold for the top price of the day. A peculiarity not uncommon in the Berkshires was the firmness of the flesh, the broad backs and the close fit of the belly, allowing little or no waste in that part of the animal. They were bought by Swift & Co., and went to that department of their trade known as "Diamond E," and were killed and hung separate from the stock killed that day.

That Hood's Sarsaparilla purifies the blood and relieves a vast amount of suffering is not a theory but a well known fact.

When writing to advertisers please mention the Michigan Farmer.

A HEALTHY SKIN MEANS A HEALTHY SHEEP.

THE NON-POISONOUS ZENOLEUM

SHEEP DIP INSURES THAT.

No Lice, No Ticks, No Scab.
Clean Skin, Fine Fleece, Better Price.
Surest, Safest, Cheapest, Best.

Write for price and proof. Agents wanted.

Zenner-Raymond Disinfectant Co.,
16 Ainslie Street, DETROIT, MICH.

DO YOU FEED FOR PROFIT?

WHY FEED ROB YOU MILK?

No Flies, Ticks, Vermin, or Sores on Cows.

If 1 cent is spent in
Send 25 cents to
Mfg. Co., 1006 Fair-
mount Ave., Phila.
Pa. They will return 1 pint, and guarantee to refund
money if cow is not protected. **MERIT** brought more
duplicate 1¢ and 25¢ gallon orders in 1896 than ever
Trial gal. 81 lbs.; lasts 5 cows a season. Agents wanted.

SHOO-FLY

LARGE ENGLISH BERKSHIRE SWINE of the best strains for sale. Write for breeding and prices. C. E. PALLTHORP & CO., Mt. Morris, Mich.

The Horse.

TWIN COLTS CAN BE RAISED—NO USE DISPUTING IT.

Neil G. Reid, of Macomb county, relates the following on this subject: In answer to the inquiry of H. W. D., of Ashland, Michigan, May 11th, '97, "Can twin Colts be raised," I answer yes. I refer you to Mr. John H. Wilson, a neighbor of mine. In 1880 I sold him a black mare (from which I raised several colts previous to this time), which came into the hands of Mr. Wilson the following season, and he, being desirous to raise a colt from her, was troubled somewhat in the fore part of the season to secure the object in view. So, being discouraged as to service, he resolved to give her the service of two different stallions one after the other. The horses used were Master King and Young Robinhood. The result of such service was one mare colt and one horse colt, both black. One of these colts resembled Master King and the other Young Robinhood, but were nicely matched as to color and general looks. The colts were broken and driven by Mr. Wilson and his family as a matched span of horses for the last twelve years, and are still alive and doing good service yet. We may add further that said mare at the time of birth of these colts was fourteen years old; also that she was a very heavy milker, which accounts for the successful raising of both colts.

A. B. Daw, of Hillsdale Co., sends the following: I see in the FARMER of May 22d that H. W. D., of Ashland, asked if twin colts can be raised. I have a pair, foaled May 6th, and they are still living and doing nicely. I don't see any reason why they should not live.

A. J. McMillan, a veteran in the horse breeding business, sends the following from St. Joseph county: Being a reader of your paper, and seeing an inquiry in a recent number regarding twin colts, I will write on the subject from personal knowledge and experience. There are now at work near me two pairs of twin horses, both good teams. One pair is seven years old this spring, the other is older. The younger pair is owned and was foaled the property of my brother, who lives two miles from my place. They were right in every particular when foaled, and have been ever since, there never being over eight pounds difference in weight. They were sired by the Percheron stallion Duke of Perchee Jr., in which I was then interested. When first dropped, one was stronger than the other, and when they were about 12 hours old my brother began to feed the weak one cow's milk. I told him to stop that at once. He did not know what to do, so I said for him and his man to stay up with the mare, keep back the strong colt, and let the other have what he wanted. He did so for two days and nights, and after that there was no more trouble. All twins want is own mother's milk, and no other. Neither do you want to feed your mare too highly while they are young. She will give enough milk for both, and when about a month old you can begin to feed them. These twins are now about as fine a pair of 1,400-lb. horses as you can find. Do not get too anxious to have your colts come too fast. Give them time and proper attention, and they will come all right.

W. R. Smith, Washtenaw Co.:—"Can twin colts be raised?" Answer, yes. There is a farmer near here that has a span of bays six years old that he drives into this city every little while. They are well matched, and you would not know them from any other single birth, so far as size and build are concerned. Unless your brood mare is an unusually large milker you will have to fix a bottle and feed them.

Wm. Haessler, Washtenaw Co.:—"Having read in the FARMER of May 22d an inquiry about twin colts, whether they could be raised, I would say yes, as I have a Cleveland Bay mare, about eleven hundred and fifty pounds, which has raised a pair of extra fine colts. They are now four years old and weigh about twelve hundred each. I took a little extra care of the mare, and fed her all the bran and oats she would eat in order to have her give sufficient milk for both; and when the colts were three or four weeks old commenced feeding them a little bran, and they done as well as one.

W. S. Rockwell, Bloomingdale, Van Buren Co.:—"I have a pair of twin fillies, four years old, sired by Fenaco, 15266, their dam by Robert Whaley. We did not work the mare, but let her run with the colts all summer. Fed her a mess of bran and oats wet until quite sloppy with cow's milk. They did nicely. The next spring the same mare raised a fine filly sired by Young Wilkes.

S. H. Hicks, of Eaton County, sends his observations: I see in a late issue of the FARMER that H. W. D. of Ashland asks if twin colts ever live. I will say that I have seen a pair of them three years old, in New York state, and have heard of others. There is no reason why they should not live if they have enough to eat. The trouble with twins is that they are generally dead before being foaled. If the mare fails to give them enough milk, feed them some, and as soon as they will eat oats give them some. It will not take long for them to learn to eat.

E. R. Merithew, Livingston Co.:—"In your last issue I saw the question asked, do twin colts ever live? Yes, why not? Frank McDonough, of this county, has a pair that are two years old now, and they are dandies.

J. G. Cowan, Kent Co.:—"Seeing inquiry about twin colts, as to whether they would live or not, I can say they will. There is a pair three miles from my place. I have seen them from little colts till now, every little while. They are now three years old. They ran with the mother the same as one colt would. They may be less likely to live than twins of other classes of stock, but if they get started all right I don't think there is any more danger than with anything else.

E. H. Evans, Minnesota:—"In reply to H. W. D., in the FARMER of May 22d., can twin colts be raised. I knew of a farmer in Clayton Co., Iowa, who had a brood mare which had twins. The mare did not furnish milk enough, so the farmer fed the colts cow's milk. As the colts grew stronger he increased the feed. When the colts were three years old he broke them, and at five years old he sold them for a good price.

TO START A BALKY HORSE.

John Haines, the manager of Gentry and Robert J., in a letter to the *Horse World*, says: "For the benefit of those who have been caused a great deal of anxiety by a balky horse, lost trains, as well as their tempers, and even sometimes ruined the horse, the next time they have the experience or should run across a balky horse, no matter how bad he is, let me tell you how to start him 99 times out of 100. Of course, it may fall one time in 100. When a horse balks, no matter how badly he sulks, or how ugly he is, do not beat him, don't throw sand in his ears, don't use a rope on his hind legs, or even burn straw under him. Quietly go out and pat him on the head a moment, then take a hammer, or even pick up a stone in the street, tell the driver to sit still, take his lines, hold them quietly while you lift up either front foot, give each nail a light tap and a good smart tap on the frog. Drop his foot quickly, and then chirp to him to go. In 99 cases out of 100 the horse will go right along about his business, but the driver must keep his lines taut and not jerk or pull him back. If I have tried this once, I have tried it 500 times, and every time I have suggested it people have laughed and even bet \$5 and bottles of wine. So far I have won every bet. This may make you smile, but a horse has more common sense than most people are willing to give him credit for. The secret of this little trick is simply diversion. I am a firm believer that with kindness, proper care and treatment, a horse could be driven with a string." Those who have occasion to deal with a horse that is addicted to that most aggravating of equine habits—balking—will do well to try the simple remedy suggested by Mr. Haines.

HORSE GOSSIP.

JOHN SPAN has discarded the overdraw check rein and maintains that an animal can go faster rigged with side check, as it leaves his head perfectly free.

THE four-mile record was reduced on May 20th, at Oakland, Cal., to 7:11. It was done by a small four-year-old mare called Lucretia Borgia. She is by Imp. Brutus, dam Ledette, by Nathan Combs, second dam Gypsy, by Imp. Hercules, third dam Miami, by Belmont, fourth dam Maria Downing, by American Eclipse; sixth dam Browlock, by Tiger, seventh dam by Imp. Speculator, eighth dam by Imp. Dare Devil. The first two miles of the race were covered in 3:55½, but after this the pace increased so that the two and three-quarter miles were run in 4:55½, three miles in 5:22½, and the four miles in 7:11. The world's record at two and three-quarter miles is 4:58½, made by Hubbard at Saratoga in 1873, and the three-mile record is 5:24, made by Drake Carter at Sheepshead Bay in 1884. She was ridden by Clawson and carried 85 pounds. The performance was a wonderful one, especially when the increased speed of the last part of the race is considered, and should do away with the idea of some turfmen that thoroughbreds of the present day cannot go a distance.

GIL CURRY, who has recently returned from a trip to Europe, in an interview makes the following timely observation: "You people over here kick about the treatment you get from the judges' stand. You don't know when you've got a good thing. I saw the judges fine a driver \$10 because he hadn't a clean-shaved face. And they wouldn't let them drive that race, either. He had to get someone else to drive, and go get shaved. If you smoke a cigar, and go to the post with a big cud of tobacco in your mouth, you are liable to be ruled off for a considerable time or fined very heavily. No man can drive in a race over there without clean silk jacket, cap and tights, jockey boots neatly polished, clean standing collar, cuffs, kid gloves and a clean shave. And you never saw anything look nicer than a lot of well-groomed horses, bright sulkies, and drivers dressed like that, engaged in a race. It would be a great thing for the business over here, and I wish the big associations would do it."

ONE of the great turf events, the Brooklyn Handicap, was run for on Monday of last week. The race attracted an enormous crowd from New York, Brooklyn, and neighboring towns. The track was heavy from recent rains, and it was the opinion of the veterans that a light weight would likely win with the track so heavy. The purse is \$10,000 guaranteed, quite enough to make owners anxious. The entries were Howard Mann, Lake Shore, Volley, Loki, Handspring, Sir Walter, King Arthur II,

Belmar, Ben Eder, Jefferson and The Swain, and they finished in the order named. Handspring who carried top weight, was a strong favorite. He was not a factor in the race. He was carrying 127 lbs., and the winner, Howard Mann, and second horse, Lake Shore, carried only 106, while Volley, the third horse, had only 95 lbs. The weights tell the story, and selected the winners; but Howard Mann ran a very surprising race, as he took second place early in the struggle, finally assumed the lead at the three-quarters, and finished the mile and a quarter in 2:09¾, good time for the track, four lengths ahead of Lake Shore, who was three lengths ahead of Volley, and the big weight carriers well back. Howard Mann was sent to the post instead of The Winner, because his owner knew him to be a good mud horse, and he was not disappointed. The betting was heavy, and Handspring's backers dropped a lot of money. Mann is owned by George E. Smith, "Pittsburg Phil," who also owns The Winner and Belmar. He purchased the horse a year ago for \$3,000 so as to get rid of him in a race in which he was entered against Belmar. He knew Mann was the best horse in the race purchased him, Belmar won the purse, and now Mann has landed the Brooklyn.

LAST September the bay trotting mare Bertie R., by Wilkomont, record 2:12¾, and one of the most prominent trotters on the western turf, immediately after winning a 2:15 class at La Crosse, Wis., was sold by W. H. McKinney, who campaigned her, to a man of whom nothing special seemed to be known except that he was a stranger to horsemen there; that he paid cash on the nail for her, shipped her out of town on the first train, and was dumb as to his or the mare's destination, of which not the slightest hint escaped him. If the earth had opened and swallowed Bertie R. her disappearance could not have been more complete. Not only was she never seen again—she was not even heard of. As weeks, and then months, passed, the turf papers began to ask, "What has become of Bertie R?" The horsemen began to echo the question, and it became the settled opinion that she was masquerading in new pastures under a new name. Meanwhile, in the late fall, the bay mare Adria, by Adrian Wilkes, turned up in Europe and began to win all the slow classes at the various winter meetings with the same regularity that the notorious Bethel-Nelly Kneebbs had. The past had given its clue to the future. Various indications pointed a suspicious finger at Adria, and a still hunt was instituted. At first, so cleverly had all tracks been covered, the investigators were almost convinced that they were on a false scent. But patient work and the slightest of accidental clues at last led to the right track. Link by link the chain of evidence was established, and the final complete success was achieved of fully identifying Adria with the missing Bertie R. Her European career has come to a summary conclusion, and the national association has added another triumph to its list of successes as the terror of the "fingers." It turns out that Adria was managed by O. Heffner, once a partner of Robert Kneebbs, and that he and the mare quietly crossed the channel to England before the French authorities had secured sufficient evidence to hold them.

When writing advertisers mention Mich. Farmer

McLAUGHLIN BROS.

COLUMBUS, OHIO.

We have imported more stallions from France since 1893 than all others combined. Write or call on us if you want the best of either

French Coachers or Percherons.

Horse Owners Should Use

GOMBAULT'S

Caustic Balsam

The Great French Veterinary Remedy.
A SAFE, SPEEDY AND POSITIVE CURE.



Prepared exclusively by J. E. Gombault, ex-Veterinary Surgeon to the French Government Stud

SUPERSEDES ALL CAUTERY OR FIRING

Impossible to produce any scar or blemish. The safest best Blister ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, Etc., it is invaluable.

WE GUARANTEE CAUSTIC BALSAM will produce more actual results than a whole bottle of any liniment or spavin cure mixture ever made.

Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address

THE LAWRENCE-WILLIAMS CO., Cleveland, Ohio

Be sure and work your horse when you are treating him with BICKMORE'S CALL CURE for Collar or Harness Galls, Cuts, Scratches and Speed Cracks. We guarantee a cure under those conditions. This remedy is equally good for Cracked or Chapped Teats on cows and for external sores in man. Your dealer has it. If not send 10c. for sample; enough to cure one horse. BICKMORE CALL CURE CO., Box 704, Old Town, Me.

GALL CURE

WHITE FROST, winner of the Kentucky Oaks, is by Iroquois, out of Wildflower. She had a very creditable two-year-old record. She started 22 times, winning 10 races, was second four times and third four times. Iroquois is the only American-bred horse that ever won the English Derby.

Directory of Live Stock Breeders

CATTLE.

CHOICE JERSEY BULL. 8 mos. old, sired by Stoke Pogis Cattlelever 28296, dam Bonnie Lib 2d 110123, for sale cheap. A. A. WOOD, Saline, Mich.

J. M. CHASE, Muir, Mich., breeder of Red J. Polled Cattle and Poland-China Hogs. 8 good yearling boars for sale \$15 each.

J. F. & E. W. ENGLISH, Clarksville, Mich., breeders of registered RED POLLED CATTLE, Olney and Sultan heads the herd.

MAPLE VALLEY STOCK FARM.—Galloway bulls and Shropshire ewes, from prize winners. CHAPMAN BROS., So. Rockwood, Mich.

JOHN LENSITER & SONS, Coles, Oakland Co., Mich., breeders of Scotch bred Shorthorns. Fine young bulls and heifers for sale. Also Shropshire sheep

ABERDEEN-ANGUS BULLS Booming, yearlings nearly sold. They make easy-keeping, high price steers. CLOVER BLOSSOM FARM, Klunde, Mich.

GUERNSEY BULL CALVES FOR SALE from registered stock. Address E. MILLER, Birmingham, Mich.

REGISTERED HOLSTEINS of both sexes and all ages for sale from my World's Fair prize-winning herd. 50 head to select from. Prices low. Terms easy. B. F. THOMPSON, Detroit, Mich.

CRYSTAL SPRING STOCK FARM. JERSEY CATTLE, bred for intrinsic value, in individual merit and future usefulness. Rich cream and butter product, coupled with fine form and good constitution first consideration. Stock for sale O. J. BLISS & SON, Silver Creek, Allegan Co., Mich.

FOR SALE—JERSEY BULL CALF. Combining Mercury blood 9 lines, through such ancestors as Pedro, Sweepstakes bull at World's Fair, Chicago; Hampden, Eurosas, Europa, etc. Stoke Pogis 5 lines, through such as Ida's Rotor of St. Lambert, Ida's Stoke Pogis, Ida of St. L., Matilda 4th, etc. Tormentor 3 lines, and other blue bloods. A rare chance to get a valuable bull at a reasonable price.

Address E. GOODRICH, P. O. Box 277, Lansing, Mich.

BEEF IS WANTED, AND THE SHORTHORN IS THE ANIMAL TO PRODUCE IT.

20 FINE HEIFERS OFFERED on very reasonable terms for 30 DAYS. THEY WILL NEVER BE CHEAPER. A few choice Merinos—Come quick if you want them. Come or write.

W. E. BOYDEN, Delhi Mills, Mich.

SHEEP.

HAMPSHIRE SHEEP FOR SALE.—A choice lot of all ages and both sex. Prairie Castle Farm. J. B. TAPP, Mendon, Ind. Jan Co., Mich.

SHROPSHIRE HALL STOCK FARM.—A grand lot of yearling rams from imported stock, good enough to head any flock. Also yearling and two-year-old ewes bred to choice rams; ewe and ram lambs: none better. L. S. Dunham, Concord, Mich.

HOGS.

LARGE ENGLISH BERKSHIRE SWINE, highly bred, from leading families. Write for prices. V. E. HACKNEY, Mt. Morris, Mich.

R. M. CROSS, Ovid, Mich., breeder of Victoria Swine. Stock for sale. Breeding stock all recorded. Reasonable prices. Correspondence solicited.

LARGE ENGLISH BERKSHIRES and SHROPSHIRE. Sheep highly bred. Call or address MERCHANT KELLEY, Woodstock, Mich.

POLAND CHINAS.—March, April and May pigs. Pairs not akin. Prices reasonable and eggs for sale. F. M. PIGGOTT, Fowler, Clinton Co., Mich.

express by ordering a Poland-China pig now from Hickory Grove. A. A. WOOD, Saline, Mich.

Registered Victoria Swine. Choice pigs DE. W. A. GIBSON, Jackson, Mich.

I PAY THE EXPRESS. Write to J. H. BANGHAM, Lansing, Mich., for prices on Thoroughbred Duroc-Jersey Swine.

POLAND-CHINAS. Large, and popular strains of blood. Quality and breeding combined. Now booking orders for spring pigs. L. W. BARNES, Byron, Shiawassee Co., Mich.

THE PLUM HILL HERD of Berkshire swine, Shorthorn cattle, B. P. Rock and S. P. Hamburg Fowls. Eggs and pigs for sale. C. M. BRAT, St. Johns, Mich.

N. A. CLAPP, Wixom, Mich., BREEDER OF Large English Berkshire Swine. Write for prices.

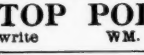
P. C. BOARS READY FOR BUSINESS. Cheap. Write for prices. Gold Mine Seed Corn \$1 per bushel. A. H. POSTER, Allegan, Mich.

WE can give you BARGAINS in POLAND-CHINA PIGS and B. P. M., two grand yards. Eggs 15 for \$1. Write WILLARD PERRY or Hastings M. H. BURTON, Mich.

I SOLD CORWIN KING for \$200 at 7 years. He now heads the oldest herd in Iowa. If you want TOP POLAND-CHINAS write WM. H. COOK, Waterford, Mich.

W. O. WILSON, Okemos, Mich., proprietor of the Michigan Central herd of IMPROVED CHESTER-WHITES. I have a few head of '96 stock (both sexes) at reduced prices to make room for new comers.

CHOICE LIGHT BRANNAS. Eggs, 15 cents for 13; 25 for \$1.25.



The Poultry Yard.

For the Michigan Farmer.

QUERIES AND ANSWERS.

Farmer's Wife, Gault, Mich., writes: "Will you please inform me how to raise turkeys? I have some small ones but do not understand feeding them. Please give me some suggestions as to their feed while they are so tender." The food for young turkeys is not so much as the care they should receive. They should be kept warm and dry. If they are kept dry there will not be any danger of loss. The feed should be hard-boiled eggs exclusively for the first week, and then bread crumbs may be mixed. After they are three weeks old wheat may be given them, but care must be taken not to feed sloppy food at any time, or to allow them to get wet while young, or until their feathers are well grown. We have had a goodly number of communications on the subject of feeding turkeys. We now have one from friend J. W. G., Holt, Mich., asking information on this question, which is answered in the above article.

It seems to me that it would be a good plan to make a note of the questions and answers as they appear and are answered in the FARMER, for future reference. We know that we copied some a year ago, and now we find that we were wise in doing so. They were from horsemen and were of great value to us recently.

Hattie Newton, Ottawa Co., writes: "What is the matter with my hens? They reel around, fall upon their heads, and sometimes act as though they had weak legs. They cramp and straighten out, and throw themselves upon their heads, etc." Your hens have indigestion and rush of blood to the head, caused by too much fat and too much heavy feed. Feed less corn and more bran; give a tablespoonful of sulphur mixed in two quarts of feed three times a week. We would advise you to give some kind of meat to them twice a week.

This correspondent also asks what is a good tonic for poultry. Tincture of iron is the best we ever used—a teaspoonful to two quarts of water. She also asks what is good for scaly legs. Make a paste of sulphur and sweet oil and anoint the legs three times a week. Treat them at night while they are quiet and the effect is better. This treatment will soon remove the scales and will not hurt the fowl.

We would like to call the attention of readers of the FARMER who would like information upon the subject of poultry and their diseases to the fact that all communications should be sent to the office of the FARMER at Detroit. This will insure a prompt answer. We have had a large number of questions come to us direct which were not answered in the FARMER, and have had recent letters asking why they were not so answered. We will say we are not authorized to answer questions except those which come through the office at Detroit, so the reader will see why those questions which were sent to us direct were not printed. We have informed all who wrote us to send all matter for publication to the head office, and hope that in the future it will be done, as it saves a good deal of extra work and their wishes are always attended to if this is done. C. L. HOGUE.

For the Michigan Farmer.

POULTRY NOTES.

The great need is for an X-ray that will show the inside of a hen. We want to know which hens are getting ready to lay.

This is the way a practical young farmer speaks of a fowl for the farm: "My aim is to keep such breeds as will, under the conditions necessarily present on the farm and with the care that I am able to give them, yield the largest net cash return, and I am convinced that the Buff turkeys and Leghorn hens fill the bill." The hens need no recommendation, and the turkeys are meeting with favor where best known. Being medium-sized fowls they are in better demand than the bronze, while their quick growth and early maturity are qualities that commend them to the turkey-raising public.

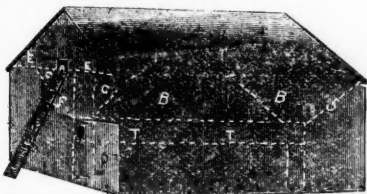
The Farm Journal gives a convenient substitute for a coop that can be used when the chicks are first hatched. It consists of a box about two feet square and eight or ten inches high. The bottom is covered with dry sand or other litter. This may be moved about as desired, set out in the sun during fair weather and put under cover at night or on stormy days. The hen is at liberty to go as she pleases, but will not get far from the box while the chickens are in it. Such a box would be much easier to keep clean than a coop. But there would be one objection. It would not be many days before the chickens would fly out if the box were not over a foot high, and if it were much higher it would be too cumbersome.

The turkey hen has some foibles which the beginner at poultry raising should know how to humor. When in the wild state she found it necessary to hide her nest in the brush. After laying an egg she would cover it with leaves. The necessity for such precaution does not exist when the

fowl is domesticated, but the modified habit lingers still. If a suitable place is near at hand she is not likely to wander as when no provision has been made for her. She is not fastidious. A little brush thrown into a fence corner so she can get behind it will satisfy her, providing there is a handful of leaves to make a nest of. But she does not take kindly to any disturbance, in which case she is apt to hide her nest some distance away from the house, and choose a place so well or conceal it so that only a careful search will discover it. F. D. W.

A MODERN POULTRY HOUSE.

I have noticed several sketches and plans for building chicken houses, in the FARMER, but I think the one I send is better than any of them. It is a modern building. It is 15 ft. long, 12 ft. wide, 10 ft. high to plates, and 15 ft. to the comb. The hopper, B B, is 12 ft. long, running from within 3 ft. of the front end to the back end of the house. The sides, S S, are 6 1/2 ft. from the eaves inside, to the manure trough, L L, which is 2x2 ft. and running the entire length of the hopper. The trough is 4 ft. from the floor, supported on six posts resting on the floor. A small pen or shallow box may be made on the floor at the left of the manure trough, to receive the manure from the trough where it will be dry until needed.



The nest boxes are placed on a board fastened to the planking inside, and on each side, about 4 ft. from the floor. The door, D, which can be made any size wished, is placed at the end of the house. A door should be placed at the dark, round hole in end, which is the opening from the floor to manure trough, C C, being planked up. The deck floor, E E, should run from the top and end of hopper to door A, being 12x3 ft., the roosting poles being placed directly over the hopper crosswise. F is a plank with cleats nailed on for the passage of the chickens to and from the roost. A is a door from deck floor.

The part of the ground floor not taken up by the manure box can be used for young chickens to roost and stay in during wet and damp weather. When they are old enough to roost on poles they may be easily caught and placed in the manure trough and they will climb up to the roosts. After being let out several times with the other chickens they will go to the roosts by themselves. Windows may be put in south side of the house. If the lumber is green it should be battened well to keep out the cold and air. With a house of this kind I never saw a case of the roup until we moved where we live at present, where we have to use a little, open lopsided house.

FAYETTE CO., O.

J. P. GOODBAR.

A CHAPTER ON DUCKS.

If popularity speaks anything for ducks, the Pekins have the floor and bid fair to hold it. Having obtained a flock of Pekin ducks from a good strain, (the best things are higher priced at first, but much cheaper in the long run, as anyone can easily find out by breeding from poor stock), they should be fed in the fall sparingly of fattening foods. Keep them slightly hungry most of the time, giving them enough food at a meal to just satisfy their appetite; to eat between meals, grass, turnip tops, cabbage leaves, etc.; anything in the shape of green food they will eat with avidity. Their other food may consist largely of boiled turnips or potatoes, mixed with hot water about equal parts of corn meal and shorts. Now and then a little beef scraps may be added, and shells and gravel should be constantly kept before them. The latter applies to ducks of all ages. The object now is to keep them from getting too fat, before the laying season opens; after that the danger is not very great, as a great deal of the food that would form fat goes to build up the structure of the egg.

The ducks should be driven into the house every night during cold weather, and when snow comes it is better to keep them shut up altogether, bedding down with meadow hay often enough to keep them dry and warm. They may be let out for exercise in the middle of the day, when the sun shines warm.

I find it more satisfactory to never use artificial heat to induce early laying, as the eggs thus obtained will not have the vitality that they would otherwise have. We are after eggs to breed from now, and not for eating purposes; in the latter case it might do to force. It is far better to breed for the early layers, and thus obtain strong eggs.

Breeding ducks should never be fed more than twice a day on their regular food, and they should have green food every other day throughout the laying season, to insure fertility of the eggs. For this purpose cabbage, sliced raw turnips, turnip tops, or rowen cut up into short lengths and steamed a short time, will do, but it is absolutely necessary that they have green food furnished them in some form, or the eggs will

be below the proper percentage of fertility. Occasionally they may be fed a bunch of whole corn, wheat screenings, oats, rye or barley.

After the laying season is well commenced they should be fed very liberally twice daily. A liberal supply of beef scraps will be found beneficial from this time on. As the weather becomes warm they should be given their liberty during the day, and a little later on should have the option of remaining out nights. They lay mostly in the early morning, and the eggs should be gathered at about 9 o'clock, or earlier if the weather should be very cold, to prevent freezing. Pekin ducks are best kept in flocks of 20 or 25, one drake to four or five ducks. For a flock of this size, about 200 square feet of house room is necessary. A house 100 feet long by 13 feet wide will accommodate about 120 ducks, and allow for an alley-way three feet along the side. A 2-foot partition of cheap boarding is sufficient to separate the pens. The feeding troughs may be placed in the alley with an opening through the partition, so the ducks may get their heads through and eat. This saves a good deal of labor in feeding, and keeps the ducks from getting in the troughs with their feet. The house should face the south or southeast, have plenty of light, and be thoroughly drained. A few nests placed low down are very good at first, but later on they will drop their eggs anywhere on the ground, even upon the snow, if allowed to go out.

Ducks' eggs remain infertile for only a short time after they begin laying, going from perhaps 30 to 80 per cent fertile at a jump, and remaining there the rest of the season, decreasing towards the last. They even go to 90 and 95 per cent with good care and feeding.

Having collected the eggs and washed off the dirt, they should be kept in a cool place, not below 45 degrees, and turned over once a day until wanted for incubation. The eggs may be kept for a month or six weeks, but it is safer to use them when not over three weeks of age.

I do not propose to go into incubation, as the subject has already been thoroughly discussed by experienced men. I would, however, call attention to the fact of duck's eggs "pipping" 36 to 48 hours before coming from the shell, so that one does not want to throw the eggs away or help the ducklings from the shell if they do not appear as quickly as chickens, and the eggs which are pipped should be kept with the hole uppermost, else a gummy liquid from the egg will glue the bill to the shell and cause death in a few hours.

The ducklings should be fed for the first time about 36 hours after emerging from the shell.

The food should consist of hard-boiled eggs, chopped fine—the infertile eggs answer this purpose very well—one-fourth, and bread crumbs soaked in milk three-fourths. A little meal may be added if the mixture is too moist. They should be fed upon this for a few days and then given corn meal, (not to extremes), shorts, middlings, barley soaked in milk—in fact, almost any food that is not fattening. Stale bread is very good where it can be obtained cheaply. They should have some kind of green food, such as cabbage, cut grass, etc. If the weather is warm they may be turned out-of-doors, to pick up what green food they need. A young duckling is much more susceptible to cold than a chicken, and must be kept warmly housed for a week or ten days. In cold weather water must be given in automatic fountains, made so they cannot get wet, as a chill at this age is almost sure death. They require a brooder at first, which, besides giving heat for sleeping apartments, gives a heated run, so that they may have exercise without being chilled, and when let out of this brooder—which in warm weather may take place at the end of four or five days—they should stay out only a short time at first, during the middle of the day, gradually lengthening the time until, when they are three weeks old, no brooder is necessary. V. M. CROUCH.

SILENT SUFFERERS.

Women do not Like to Tell a Doctor the Details of Their Private Ills.



The reason why so many women suffer in silence from the multiple disorders connected with their sexual system is that they cannot bear to broach the subject to a man, even if he is a physician.

No one can blame a modest, sensitive woman for this reticence. It is unnecessary in these times, however, for a woman makes to all afflicted women a most generous offer. Mrs. Pinkham of Lynn, Mass., bids every woman who suffers to write to her and confide every symptom that annoys her, and she will give her advice without charge, and that advice is based upon the greatest experience ever possessed by man or woman in this country, and extends over a period of twenty-three years, and thousands upon thousands of cases. Why suffer in silence any longer, my sister, when you can get help for the asking? Don't fear to tell her everything.

The case of Mrs. Colony, whose letter to Mrs. Pinkham we publish, is an illustration of the good to be received from Mrs. Pinkham's advice; here is a woman who was sick for years and could get no relief—at last in despair she wrote to Mrs. Pinkham—received in return a prompt, sympathetic and interested reply. Note the result and go and do likewise.

"I was troubled with such an aching in my back and hips, and I felt so tired all the time, and had for four years. For the last year it was all I could do to drag around. I would have such a ringing in my head by spells that it seemed as though I would grow crazy. I ached from my shoulders to my feet and was very nervous. I was also troubled with a white discharge. I wrote to Mrs. Pinkham at Lynn, Mass., received a prompt reply and followed her advice, and now I have no backache and begin to feel as one ought; in fact, I never felt better in ten years than I do now. I thank God that I went doctoring with Mrs. Pinkham when I did, for if I had not I know I would have been in my grave."

—MRS. NELLIE E. COLONY, Nahma, Mich.

STEAM ENGINEERING

(Stationary, Locomotive, Marine); Mechanical Drawing; Architectural Drawing; Machine Design; Electricity; Architecture; Plumbing; Railroad, Municipal, 31 COURSES & Bridge Engineering; Surveying and Mapping; Metal Pattern Cutting; Bookkeeping; Shorthand; English Branches; Mining; Metal Prospecting. All who study GUARANTEED SUCCESS. Fees Moderate, Advance or Installments. Circular Free; State subject you wish to study. International Correspondence Schools, Box 365 Scranton, Pa.

DUFF LEGHORNS. S. C. B. Leghorns, Barred P. Rocks, Black Minorcas, Pekin Ducks. Eggs \$1 per 17. E. L. LARNED, Wordon, Mich.

PEKIN DUCK EGGS, Now \$1 per 13. White Cloud strain. E. A. CROMAN Grass Lake, Mich.

30 S. C. B. LEGHORN EGGS FOR \$1.00 from pure, healthy birds Forsyth strain. Plenty of time yet to hatch Leghorns F. M. BRONSON, Vermontville, Mich.

ENGLISH PHEASANT EGGS FOR SALE, \$2.50 per 13. Order early and get June birds. Finest game bird on earth. Money must accompany orders. F. T. HYNE, Brighton, Mich.

LIGHT BRAHMA EGGS for hatching from selected stock. \$1 per 13; 24 for \$1.50. E. D. BISHOP, Woodbury, Mich.

BIG beautiful BARRED P. ROCKS, exclusively. Big scoring, thoroughbred stock. Pitting and Conger strains. Cockerels \$2 to \$2.50; Eggs, \$1 per 16. E. M. KIES Reading, Mich.

CANCER and Tumors scientifically treated and cured. No knife. Book free. 25 years experience. Dr. L. H. Gratzburg, 118 W. 7th St., Cincinnati, Ohio.

RUPTURE

CURED AT SMALL COST. In Chas. Cluthe's Genuine Truss (pat'd) we change position from hips, spine and bones to the natural cushions of muscles. Ball-bearing pad uses rupture's own force to retain itself. Our book sent free, in plain sealed envelope. CHAS. CLUTHE CO., 213 Woodward Av., DETROIT, MICH.

A Delicious Health Drink to replace TEA and COFFEE, which are always hurtful. Send 2 two-cent stamps for sample. BATTLE CREEK SANITARIUM HEALTH FOOD CO., BATTLE CREEK, MICH.

There is no better wheel than Sunol Bicycle

There are no better wheels for the money than Hercules & Stella for men, for women. Send 15 cents for pack Sunol Bicycle Playing Cards. The McIntosh-Huntington Co., 14 LONG STREET. CLEVELAND, O.

When writing to advertisers mention Mich. Farmer.

Grange Department.

OUR MOTTO:—"The farmer is of more consequence than the farm, and should be first improved."

Address all correspondence for this department to
KENYON L. BUTTERFIELD,
AGRICULTURAL COLLEGE, - - MICH.

News from Michigan Granges is especially solicited.

OFFICERS MICHIGAN STATE GRANGE.

Master—George B. Horton, Fruit Ridge.
Overseer—E. B. Ward, Charlevoix.
Lecturer—Jason Woodman, Paw Paw.
Steward—Geo. L. Carlisle, Kalkaska.
Assistant Steward—Wm. Robertson, Hesperia.
Chaplain—Mrs. Mary A. Mayo, Battle Creek.
Treasurer—E. A. Strong, Vicksburg.
Secretary—Miss Jennie Buell, Ann Arbor.
Gatekeeper—M. H. Foster, Kent.
Pomona—Mrs. Estella E. Buell, Union City.
Flora—Miss Ritzpah Norris, Lansing.
Ceres—Mrs. Estella Knight, Swartz Creek.
Lady Assistant Steward—Mrs. Mary Robertson, Hesperia.

EXECUTIVE COMMITTEE.

W. E. Wright, Coldwater; Chairman; H. D. Platt, Ypsilanti; A. E. Palmer, Kalkaska; Thos. Mars, Berrien Center; R. K. Divine, Holly; E. A. Holden, Lansing; F. W. Redfern, Maple Rapids.

OFFICERS OF NATIONAL GRANGE.

Master—J. H. Brigham, Delta, O.
Overseer—Aaron Jones, South Bend, Ind.
Lecturer—Alpha Messer, Vermont.
Steward—J. L. Cox, Readington, N. J.
Asst. Steward—A. J. Newcomb, Golden, Colorado.
Chaplain—O. N. Hale, No. Stockholm, N. Y.
Treasurer—Mrs. F. E. McDowell, Columbus, O.
Secretary—Jno. Trimble, 514 F. St., Washington, D. C.
Gatekeeper—W. E. Harbaugh, Missouri.
Ceres—Mrs. Lucy G. Smith, Delaware, O.
Pomona—Mrs. Sarah G. Baird, Edina Mills, Minn.
Flora—Mrs. L. E. A. Wiggins, Mayville, Me.
Lady Asst. Steward—Mrs. S. G. Knott, Moler, W. Va.

EXECUTIVE COMMITTEE.

Leonard Rhone, Centre Hall, Pa., Chairman.
J. J. Woodman, Paw Paw, Michigan, Secretary.
N. J. Bachelder, East Andover, N. H.
J. H. Brigham, Ohio, Ex-Officio.

THE LEGISLATURE OF 1897.

There are so many standpoints from which to review the work of a legislature that such a review is frequently unsatisfactory. There is the standpoint of what the people want, or think they want; the standpoint of ideal legislation; the standpoint of comparison with other legislatures; and so on. The easy, and usually the popular, standpoint is that of what the legislature didn't do.

It is at least safe to say that this legislature was close to the people, and in a great many respects reflected the sentiment of the people, although not fully perhaps. The feeling of the people was for a radical cutting of appropriations, and, while the final results were not radical, they are quite satisfactory in this particular. Possibly the legislature has stood closer to the people in the respect of preventing certain legislation than in enacting progressive laws. In fact, this legislature may be called an opposition legislature. The prevailing sentiment of the House was against any new institutions; any new appropriations in fact, against almost any new legislation of a general character, especially if it involved any new offices or was in any sense an experiment. The only exception to this was the feeling regarding legislation against corporations. On the other hand, the Senate was largely in opposition to the executive, and more especially on all questions which were radical in their nature as affecting corporate interests. The two houses simply represented different methods of thinking and different classes of people. But in neither house was there the spirit of progress, truly speaking. Doubtless the feeling of the people is just of this character—in opposition to anything new, at least until the pressure of hard times becomes less noticeable.

The chief accomplishment of the legislature was along the line of taxation. State appropriations have been diminished considerably from two years ago, although we believe there is not a material reduction from four years ago, at which time a more normal appropriation was made. It is estimated that, taking into consideration the lessened appropriations and the laws providing for increased taxation, state taxation will have been reduced about 20 per cent. There are other measures of importance which passed, among them being an amendment to the election law; a law simplifying court practice; the beet sugar law; the oleomargarine law, etc. These, and others, will, in time, produce good results.

There are other things, however, which the legislature did not do. They really took no steps toward permanently solving the problem of taxation, because, while it is very important that expenses be reduced, the real problem in taxation, in Michigan, is the question of distribution of the burden. Increasing the specific tax on rail-

roads is a step in this direction, but probably as much more might have been gained by passing an inheritance tax law, which was not done. Another measure which would save the state many thousands of dollars, and which in time, ought as well to result in far better government, is a measure for home rule in some form for counties and cities. The real heart of the problem of taxation was, however, not reached. The temperance people won the very doubtful victory of preventing any letting down in the liquor laws; they did not succeed in any progressive temperance legislation. The important questions of forestry and of good roads were untouched. Laws enabling local taxation to be reduced received very little attention.

It will be observed that we have been judging the legislature, perhaps unconsciously, by a sort of ideal standard; we have kept thinking of what we should like to have had done. It must not be interpreted, however, that we purpose to judge this legislature as one which is decidedly inferior; considering the sentiment of the people at this time the work has been fairly satisfactory.

However, those who believe in high standards of State legislation cannot help but feel that the next legislature ought to do better. How are we going to bring about such a result? The method, in our opinion, is that these State questions be discussed from this day on till the next legislature convenes. Let us look on all sides of the questions, find out what is the nearest right and elect a legislature to carry out our wishes.

Another point. The next legislature ought to be elected on State issues and not on national issues; no national question ought to cut any figure. Can we not, by agitation, bring it about so that candidates of all parties in the next State election will base their canvass on State issues? We never shall have satisfactory State government until this is done.

GRANGE NEWS.

MORENCI GRANGE No. 280:—The last meeting was set apart for memorial exercises. Bro. Mason read a paper entitled, "Erecting monuments." Bro. Deyo gave us a thirty-minute talk on the "Origin and history of Memorial Day from 1866 to the present time."—COR.

LENAWEE CO.
CLEON GRANGE No. 633 is in good working order, and has 40 members in good standing. We meet every two weeks in the afternoon at our hall. At our last meeting four took the third and fourth degrees and one the first and second. We club together and send for some things and find it a great saving.—S. C. MILLER.
MANISTEE CO.

CADMus GRANGE had a short business session May 29, then a fine memorial program consisting of an oration, recitation, speech, male quartet, vocal solo and instrumental music. The flowers used in decorating the hall were sent to the grave of the only one of our Order departed. A royal feast was then served. A number of guests were present.—DICKIE TOBIAS.
LENAWEE CO.

PLEASANTON GRANGE No. 557 has five more applications for membership. New members and old alike are working. After a good program including an essay by Sister Sheldon on the "Culture of Onions," and reading and recitation, the question box was then opened. Among the many questions was "In letting a farm what would be the just proportion to receive for the rent of the farm?" It was discussed at some length, and most seemed to agree that one-third for seed and tools, one third for the labor, and one-third for the land, would be just.—COR.
MANISTEE CO.

GRANGE No. 181, in the southern part of Hillsdale county five miles from the Ohio line, has its charter renewed which was issued more than 20 years ago.

Scarcely any of the old members renewed. Membership mostly of representative farmers. The soil is devoted to general farming, though best adapted to grasses; one member owns and operates a cheese factory.

Most of us are Patrons, not for the money there is in it, but for the sociability we get, and also for the possible influence we may have on legislation for the good of farmers. The paying for goods before seeing them is the objection we have to buying through the Grange methods.—A. W. DOTY, LECT.

MADISON GRANGE No. 384 held its May meeting under the direction of Flora, and the program consisted of exercises appropriate of Memorial day.

A special feature of the program was a flag drill by the children of the Grange under the leadership of Sister Nettie Smith. Several orders were handed in to the secretary for binder twine which we expect to purchase through our Grange contract.

The interest in Grange work seems to be living up in this locality and our prospects for an increase in membership are growing brighter.

We expect to entertain Pomona next Thursday.—E. R. F., Cor.
LENAWEE CO.

CAPITOL GRANGE No. 540 meets now every two weeks. May 29th., a Memorial program was presented. Brothers Ayres and Graham, the veterans in the Grange, related war experiences and the lecturer read an intensely interesting paper written by Brother D. E. McClure, Deputy Supt. Public Instruction. Brother McClure emphasized the need of true patriotism as shown in devotion to the flag, to education, to the duties of citizens.

A few weeks ago Brother Geo. Graham and wife entertained friends, including many from Capitol Grange, on the occasion of their thirtieth wedding anniversary. It is unnecessary to say that it was an enjoyable occasion.

The Grange has held a series of socials this winter, the last being at the residence of Brother and Sister K. L. Butterfield.
INGHAM CO.

CLINTON CO. POMONA GRANGE will meet with Bingham Grange, Wednesday, June 16. Grange called in 4th degree at 10:30 a. m. Roll call of officers. Reading minutes of last meeting. Reports of Subordinate Granges until noon. Recess.

Grange again called at 1:30 p. m. Song, Bingham Grange; address of welcome, Master of Bingham Grange; response, J. W. Ennest; song, Miss Belle Chapman; recitation, Miss Hattie Kinney; question box; song, Mrs. Ida Lewis and Agnes Pike; recitation, Miss Gerlie Eaton; the Bird Day question will be brought up again for discussion. Paper by E. M. Winston; song, Bingham Grange.

We hope every Patron in Clinton County will try and be present. We expect a grand rally and hope much good may come from this meeting.—MRS. C. L. PEARCE, Lecturer.

NEWAYGO COUNTY POMONA met with Holton Grange June 2d and 3d. Although held at a very busy season of the year, there was a large attendance, and the manner in which some of the topics were handled gave evidence of the fact that the farmers are embracing every opportunity to enlighten themselves on the various issues of the day. All agreed the "sugar beet bounty" would be of no benefit to this part of Michigan. "Economic methods on the farm," brought forth varied opinions; some thought we might be more economical of our time, in the care of tools, in hiring help, keeping up the fertility of the soil and the greatest economy was in using the opportunities offered by the Grange. Among other good things was the paper on "Character building in our public schools" by B. R. Miller, the recitation by Lou White, the singing by Messrs. Ferris and Lilley and the recitation "New England's dead" by the worthy master, G. A. Whitbeck.—C. K.

TALLMADGE GRANGE enjoyed another of their pleasant meetings Saturday, May 29. Although the busy season is upon us, keeping many farmers from the Grange, yet those who attended were alive and lively. E. H. Woodard opened the discussion on the improvement of Grand river; Bertha Smith read an article on the relation of mother to daughter, Chas. Alford read a beautiful poem of a memorial character, which called forth an account of the Battle of Seven Pines from Wm. Williams.

The lecturer introduced a question box, which was very interesting. Last Tuesday we entertained the Grand River Valley Horticultural Society. The hall was filled, and all expressed pleasure in the meeting, also in the way they were received and entertained by Tallmadge Grange.

I would like to urge all to attend such meetings, whenever possible, and especially, Patrons, attend the meetings of your Grange; if you go in the right spirit, you cannot help but be benefited, and when you return to your home duties, they will seem lighter, after the rest and recreation at the Grange.—M. S. W.
OTTAWA CO.

LOWELL DISTRICT COUNCIL met at Keene Grange hall, Thursday, May 27. It being in the midst of our corn planting, and with late season, the attendance was small. Numerous questions were discussed. The road question received a short discussion. "Corn and potatoes" was taken up, and also "Peach raising" and "Dairying."

The new process of tending corn was taken up. A committee of two was appointed, to report in one year on price per acre and mode of tending. By experience it was recommended to drag corn very thoroughly before and after coming through the ground.

Query: "Is dairying on the increase?" It was thought to be on the increase because of the numerous orders for creamery butter, and the demand being more than the supply, and the creamery was thought to be a necessity, for it is the step of the farmers in the way of co-operative selling. It brings all grades in uniformity of value and price. Cows are needed to bring land back to its original fertility.

Peach growing received a hearty discussion. A crop once in three or four years, with a fair price, well paid for the investment.

Next council will be held at South Boston Grange hall, June 17, afternoon session.—SEC.
KENT CO.

KENT CO. GRANGE held an interesting and profitable meeting at Silver Lake Grange hall on June 2 and 3.

The reports from the various Granges were, on the whole, quite encouraging. The following program, plentifully interspersed with music, recitations, readings, and essays was rendered:

The discussion on, "To what extent should agriculture be taught in our country schools?" was led by C. M. Slayton. Botany, mineralogy, and ornithology were spoken of as subjects which should be more studied in our country schools instead of so

much endeavor for rapid advancement in some other of the higher branches.

"What changes are necessary to make a shiftless farmer a thrifty one?" Discussion led by Scott Duley. First, teach them by showing kindly that they are not good farmers; then tell them how to do, and get them to join the Grange.

"To what extent should farmers' wives patronize the milliner and dressmaker?" It was thought that if they were competent and able they should do the work themselves.

"How can we best interest the outside farmers in the work of the Grange?" First interest ourselves, and live up to the teachings of the Grange. Pay our bills as we go. Tell them what the Grange has done and is doing for the farmer.

"How can farmers best protect their crops from drought?" Suggestions were to turn under a good crop of clover, or wet but not dry stalks or straw. Subsoil on heavy soil. On soil that is not too heavy fall-plowing is beneficial. Keep up the natural fertility of the land and give thorough cultivation.

Discussion on butter-making led by John Berry; also a discussion on the raising and marketing of fruit.

The next meeting will be held with Courtland Grange on Sept. 1 and 2. SEC.

WESTERN POMONA GRANGE met at Hudsonville and was entertained by Hudsonville Grange May 27 and 28. There were fifteen members present, a number of fourth degree members and many outsiders at the open afternoon and evening sessions.

Bro. M. M. Smith, on the subject, "Testing novelties," said we should beware of smooth-tongued agents. Farmers were often swindled by them.

Bro. Wilde thinks there are too many worthless novelties of strawberries in the market.

Sister E. Smith: It sometimes and quite often would pay farmers to test novelties on a small scale.

Sister Wilde read a well prepared essay on the subject, "The social training of children." She would keep them at home nights; teach them the consequences of evil-doing; would not allow card playing in her home.

Mr. Briggs, a pastor of Hudsonville: Parents should have confidential talks with their children. Give them liberty and privileges for innocent amusements. Keep them away from the contaminating influence of the street. A very interesting discussion on this subject followed.

"Poultry for profit," Sister E. Smith: Requires experience, time and study to make a profit in raising poultry. The discussion led to the disease of roup among poultry, its symptoms and remedies.

"What do we understand by economical methods in farm work and management?" Study well the different soils of the farm. Be careful in selecting farm machinery and caring for the same. The wise selection and proper care of good farm stock, and wise economy in the management of the household, were some of the many good ideas advanced.

Bro. T. Wilde gave a talk on vegetable diseases, showing specimens of the San Jose and Putnam scales, root aphids, root knot, oyster-shell bark louse and scurvy.

Appropriate resolutions on the death of Bro. Tracy Woodard, an old and faithful member of our Order, were read and adopted.

The program was interspersed with music and readings, making it very enjoyable as well as instructive.

The next meeting will be held at Ravena, August 12 and 13.—SEC.

BANNER GRANGE No. 640 again extends greeting, and can truthfully say we find ourselves in a flourishing condition. And although very busy, at no time have we had better attendance, or better work done in the Grange. Our membership is increasing rapidly; a class of 12 was initiated a short time since and seven reinstated members received; we also have several applications for membership before us for approval. We devote the opening session to the business of the Grange and farm business, also discussion of questions on legislative action that are vital to the interests of farmers. Of the latter we have had several that appeal directly to the people for consideration.

First was a resolution introduced by Bro. L. E. Hall relative to the making of county officers salaried officers. His idea seemed to be that leaving the sheriff's office non-salaried would be a great mistake; that it should have been one of the first on the salaried list. Discussion followed but all seemed to favor this view of the question, after some explanation in regard to the work and duties of sheriff.

A resolution offered at a late meeting of the Grange, also by Bro. Hall, that

WHEREAS, the governor of the State is using his influence and all honorable means in his power to procure legislation that will lead to the equalization of taxation and against specific taxation of railroads,

Resolved, that this Grange approve and uphold the governor in his course.

This resolution carried without discussion or dissent.

Our closing sessions we devote to literary exercises and music. At the present time we are having a contest, and will say for the benefit of those Granges that wish to create a little enthusiasm in a dull time, try having a contest, and arrange to have the brothers as opponents to the sisters in the exercises. You will not complain of lack of attendance or interest in the Grange.

We arranged to have memorial exercises May 29. The hall was finely decorated with flags and flowers, and the promise of a select program brought out a large attendance. Following the opening exercises were three notable addresses. First a very patriotic and feeling address by Bro. Justin

Beadle, himself an old soldier. Next an address by Bro. L. E. Hall, giving a very comprehensive statement of the cause of the war of the rebellion, the magnitude of the armies engaged and the great loss of life sustained, the numbers that fill unknown graves, and the thinning of the ranks of the comrades that are left. Then followed a short address by Bro. F. T. Flanagan on our duty as citizens in observing Decoration day and paying tribute to our dead heroes and respect to the living comrades. Our exercises closed by all uniting in singing "America." If a little time and trouble will create so much enthusiasm it would be well for every Grange each year to celebrate our national holidays.—MRS. E. J. VANDOREN, Corres.

IONIA CO.

CASCADE GRANGE No. 63 is still working along in its usual quiet way, having taken five new members within a few months past—all young persons.

We have discussed "Economy in farm work and management." Some thought it economy to begin using the best fruits, etc. first, and then you have the best all the time; while others thought it better economy to sell the best and live on the second grade, which was just as good but would bring less money to pay debts and taxes.

The same thoughts apply in dealing out the fodder to stock. Some would feed the best all the time, others would feed the poorest all the time, while yet others would feed alternately of straw, stalks, hay, etc., reserving the best for last feeding in the spring, otherwise feeding according to the weather.

Some thought that leaving straw scattered about on the land gave better results than plowing the straw into the soil, others thought it a bad practice, for although the first crop might be better, there was no humus or decayed vegetable matter returned to the soil, and that is one great trouble with the soil of many farms to-day. Greater economy ought to be practiced in saving the fertilizers that go to waste on the farm, especially the liquid manure, and the cleanings of the hog-pen and hen-coop.

Greater economy might be practiced in the purchasing of farm tools, making one tool do many kinds of work, such as a good drill for sowing all grains, corn included, grass seed and fertilizers. And better economy might be utilized by obeying the scriptural injunction, "Neither a borrower nor lender be;" also it is far better economy to save all the ashes and put them on the vegetable garden than to throw them in unsightly heaps about the house.

The educational line was taken up and and it was admitted by all that the education a farmer needs is greater and more varied than any other vocation. He needs to know his soil. He needs to know all about how plants grow, and what kind of food to apply to the soil. This he should understand just as well as how and what food to give his varied kinds of stock in the different stages of growth.

He should know all about the varied kinds of injurious and beneficial insects and animals, also how to check their ravages.

He should know about the rules of stock raising and breeding of all kinds, all about the different fruits and pruning and kinds of soil they need.

He should know about business principles, enough of law to keep out of lawsuits, and enough of political economy to be an intelligent citizen, and be posted as to products of foreign countries. Know when his rights are encroached upon by law makers, and know how to intelligently cast his vote without fear or favor or bias of party prejudices.

There are various ways of getting this information. From the Agricultural College, from the bulletins, from good farm papers, from the institutes, from good schools, from conversation with intelligent persons, from observation, from hard thinking and retaining what one gets from good books, and last but not least by joining the Grange and taking an active part.

Our last meeting May 29th was Flora's day and we had a very enjoyable time. A little talk on heathen mythology, who the goddess Flora was, a talk on plant life—with an appeal to the young to study up the subject and understand what plants need to be properly grown. This meeting was a gala day, with flowers and music, and neat refreshments.

KENT CO., Mich.

A WOMAN'S VIEW OF THE LEGISLATURE.

The House was composed mostly of earnest, conscientious men. They have tried to do their best for the people. There were a few members who had not passed the tinseltown and play-horse stage of development. A few, who seemed more intent on airing their own eloquence than that serious work should be done, spent valuable time just to show off.

A desirable qualification in a legislator is ability to keep still.

The chaplain of a regiment rebuked the soldiers for stealing provisions. They offered him an extra choice slice from a fine porker they had just brought in. He declined but said "I will take just a little of the gravy." Of course no member would sell his vote or his influence, still I heard speeches that smacked of "just a little of the gravy."

It was interesting to watch proceedings. Each member, intent on securing for his own measures the best recognition possible, eagerly striving to catch the eye of the speaker. When someone would move the previous question, the reaction was some-

thing like when boys pull with all their might and the string breaks.

On the cars I saw a number of men bound for the Capital to protest against a measure damaging to their interests. They complained of the difficulty in securing the attention of their representatives from the proximity of their seat to "bonnet corner." Surely no person should distract the attention of members from their duties, but what did we see? Crowds of men sitting about talking, or interviewing members, women smartly dressed wandering aimlessly in and out, in and out. One company I noticed entered the hall four times in one afternoon. The constant talking and laughing of these outside parties made such confusion that the members could scarcely hear. I would have every woman, child and man, not an employe or member, sent to the gallery, because I think them a disturbing element. I was quite indignant, however, when the sergeant-at-arms suggested that it might not be prudent for women to be present on the floor of the House the last night.

Truly this was a reflection on the chivalry of the present day among men who are chosen as representative men. The alarm

their hats. I do not mean plumes, for they are secured without hurting the bird, and are really pretty—but dead birds, head, tail, wings, feet and all.

Blackbird, bluebird, swallow, lark,
Each his well known mate might mark.

A few days ago I saw a hat with a whole duck upon it, bill and all, wings outspread, webbed feet outstretched in the attitude of most earnest and painful endeavor to get away. When will women become civilized?

YPSILANTI.

EMMA A. CAMPBELL.

THE EDITOR'S TABLE.

The action of Gov. A Broad-Minded Proposition. Pingree in requesting the opinion of the law faculty of the University regarding the constitutionality of the Merriman bill for taxing railroads was productive of no results and may be by some considered fanciful and useless. But in his letter to the University the governor gave expression to an idea that is worthy of commendation

that pertains to the life of the people of the State. Educational institutions are apt to become centers of learning rather than centers of active leadership. The one should be done and the other not left undone. The educated man should take his place in the active life of the people. The educational institution should become also the true leader and counselor of the masses of the people, as well as the loadstone and inspiration of the cultured.

Lafayette and Profound students of history will recall the fact the Spirit of '97, that some years ago a certain Frenchman, Lafayette by name, was of considerable assistance to our forefathers in their efforts to erect on this continent a government of the people. Indeed the opinion has generally prevailed that this Frenchman was so unselfish in his devotion to popular liberty that his name is worthy our homage and most grateful and enduring remembrance. To give expression to this opinion, some years ago the patriotic and liberty-loving people of this State secured a beautifully executed oil painting of this Frenchman, and hung it in the Senate chamber of the capitol building, where it would not only be safe from wanton or accidental vandalism, but where it would be, perhaps, an inspiration to the people's servants as they biennially gather to enact into forms of law the wishes of a sovereign people. But alas! A few weeks ago during the impressive and dignified closing scenes in this august body, someone (probably in the gallery) threw a missile (doubtless prepared for the occasion) with such effect (it must have been intended for some lobbyist) that it pierced the beautiful \$1,000 oil portrait of the immortal Lafayette. How it must sadden the departed soul of this unselfish man that one single citizen of this country, at a moment so solemn, and in the law-making body of two millions of freemen, could be so thoughtless, so careless! What a sad thought, too, for our legislators to carry to their homes, that the quiet closing hours of the session should be marred by the desecration of the name of the devoted Frenchman who helped us gain the liberty we prize!

In response to a request interesting the Bro. C. D. Beecher, of Young People's Flushing Grange, makes some suggestions on this topic, as follows: I am afraid I cannot help you much, for myself and wife are the only young people in our Grange.

I think, however, that socials, entertainments, and Grange picnics, where the young people can enjoy themselves, are some of the best ways to get them interested. Young people as a rule do not get interested in discussions on the various agricultural pursuits or domestic economy.

If there is anything that will discourage the young people it is to listen to a long argument on taxation, good roads, or how to bring up a child, and, if a smile can be seen on the face of some young man or lady, have the master (with the expression of a czar) call them to order.

We should like to hear some comments on the above, as well as to receive further suggestions along the same line. Lecturers, let us know your views.

A pretty initiation ode, music in the which we present in this issue of the FARMER, will doubtless be used by many Granges. It certainly should be preserved by the chorister of the Grange for occasional use. This ode suggests the question of singing and music generally in the Grange. We should like to hear from different Granges as to what part music has in the Grange programs, and how they manage to have plenty of it and of good quality and variety.

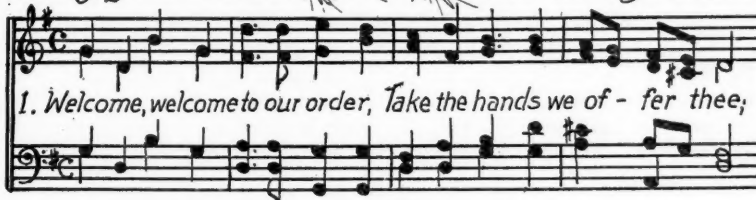
Asthma and Hay-Fever Cure. Free.

We are glad to inform our readers that a sure specific cure for Asthma and Hay-fever is found in the Kola Plant, a new botanical discovery from the Congo River, West Africa. Many sufferers report most marvelous cures from its use. Among others, Mr. Alfred C. Lewis, Editor of the Farmer's Magazine, and Rev. J. L. Combs, of Martinsburg, West Va., were completely cured by the Kola Plant after thirty years' suffering. Mr. Lewis could not lie down at night in Hay-fever season for fear of choking, and Mr. Combs was a life-long sufferer from Asthma. Hon. L. G. Clute, of Greeley, Iowa, writes that for eighteen years he slept propped up in a chair, being much worse in Hay-fever season, and the Kola Plant cured him at once. It is truly a most wonderful remedy. If you are a sufferer we advise you to send your address to the Kola Importing Co., 1164 Broadway, New York, who to prove its power will send a Large Case by mail free to every reader of the MICHIGAN FARMER who needs it. All they ask in return is that when cured yourself you will tell your neighbors about it. It costs you nothing and you should surely try it.

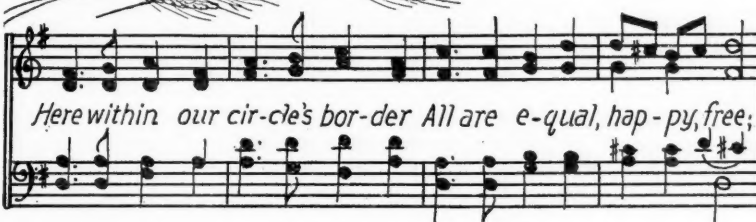
Initiation Ode.

Words by J. C. HARBAUGH.

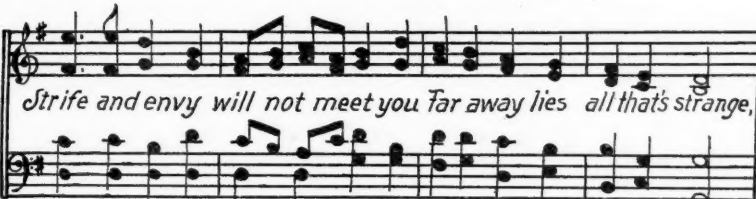
Music by M. B. C.



1. Welcome, welcome to our order, Take the hands we offer thee;



Here within our circle's border All are equal, happy, free;



Strife and envy will not meet you Far away lies all that's strange,



Love and friendship here will greet you, Welcome, welcome to the grange.

Welcome, welcome to our order,
Take the hands we offer thee;
Here within our circle's border
All are equal, happy, free;
Strife and envy will not greet you,
Far away lies all that's strange;
Love and friendship here will meet you,
Welcome, welcome to the Grange.

Here we stand forever united,
Peaceful scenes around us swarm,
'Neath this roof our vows are pledged
To the welfare of the farm;
Share with us each rising pleasure,
Join us in the songs we sing;
Filled with joy shall be thy measure
And our union peace will bring.

Far and wide our fame is growing,
Share with us the meed of praise;
After we have done the sowing
Come the happy harvest days;
After toil we rest from labor,
Here is where we come to greet
Brother, sister, friend and neighbor,
Making every joy complete.

Welcome, welcome to our order
Blessed with many a precious charm;
And to its remotest border
Lives affection for the farm;
Love flows onward like a river,
Men and winds and seasons change;
May our order live forever,
Welcome, welcome to the Grange.

was unnecessary, however; the order was good the last night, a little fun towards midnight, childish and undignified papers, still nothing of the rout the daily papers pictured. With warm handshakings and kind expressions of good will toward all, and especially the presiding officer, the legislature of 1897 adjourned, leaving buried in the Senate, along with a number of other good House bills, the Grange measure, the Anti-Appeal bill and the Farmers' Club measure, the County Officers' Salary bill. It is very difficult to pass any relief measures in which the interests of the farmers and lawyers clash, so long as the committees before which such measures must come are composed chiefly of lawyers. This matter requires attention. A WOMAN.

WHEN WILL WOMEN BECOME CIVILIZED?

Go into any audience chamber and note how large a proportion of the women present wear some part of a dead bird on

by our citizens and of acquiescence by the colleges. He said:

I make this request as governor, as I believe the University of the State can render no higher service than to aid, as far as possible, in the solution of questions of this kind. The question of taxation, as was said by Judge Cooley, is the most momentous of all the questions which affect our commonwealth. I understand it is the custom in many countries for those intrusted with the exercise of authority to counsel with and be guided largely by the wisdom and learning of the universities. I know of no more impartial tribunal to appeal to. I trust you may agree with me as to the propriety of rendering this service to the State.

It seems to us that the governor's suggestion is broad in spirit and sound in theory. We may not all agree as to the precise application of the theory, but we believe that the centers of education should also be centers of leadership in all

Miscellaneous.

NATURE'S LESSON.

The pink apple blossom is just out of reach,
Though you stand on the tips of your toes—
A lesson has nature she wishes to teach,
You will learn it before autumn goes.

Strive not for the blossom, nor weep at defeat,
But patiently wait for a while—
All things come in time—and the moments are fleet,
Soon your frown will give place to a smile.

The blossoms will die, but the good fruit will grow,
It will ripen in sun and in rain,
The weight of the apple will bend the bough low,
And the waiting will be to your gain.

Seek not the bright buds that will fade in a day,
But await the sweet fruit God will send—
The buds may be high and be out of your way,
While the boughs at the harvest will bend.
—F. S. Mines, in Ladies' Home Journal.

THREE SCENES.

"The fact is," said my young friend Hilliard, "that the long novel has had its day. The short story is to literature what the snap-shot is to photography. Character drawing and incident can best be done in two or three scenes, describing the two or three vivid hours in a life. For example, read this and judge," and he handed me a manuscript. "And after you have read it, you might as well read this slip." Here is the story.

There were three light-hearted comrades sitting out-of-doors in the June sunshine, the two girls in a hammock, and the boy on a bench opposite them. They were young; at that time before twenty when people think; a fact which they invariably fail to remember in later days when dealing with young persons of the next generation.

"I envy that fellow his chance," the boy was saying. "It doesn't come to everyone, the opportunity of giving up one's life for another, like that, and proving one's mettle."

"Indeed it was glorious," assented one of the girls; "but you know, Theodore, that one can prove one's self heroic quite as well by the little, daily acts of one's life."

"I have often wondered," interrupted Sylvia Wayne, with her chin propped upon her hand, ignoring the preceding remarks, "how I'd act if such a chance ever came to me—like the one you were telling us about, Teddy, of the fire at sea. I'm not a bit sure I should give up my place in the lifeboat to some one else."

"Why, Sylvia!" came from both listeners in remonstrance; and Emily added: "You would be the very first one to stand aside and be generous."

The girl shook her head slowly, and seriously studied the distant landscape.

"No, I'm not speaking to be contradicted," she went on; "I think it is a thing one can never know until the crucial time comes. Naturally we all admire the one who is noble and self-sacrificing, and we all feel that of course we should meet any crisis like heroes; but when I think of it—of this case of a fire at sea, of the first fright, then the real terror, the despair, the look of the water, the knowledge that in the lifeboat is possible safety, and out of it is everything that is repugnant and terrible—I wonder and wonder whether I'd meet my moment nobly or ignominiously."

"But death, Sylvia, what is it? Not a thing to fear so much; so trifling when weighed against honor and heroism and greatness."

"Well," replied Sylvia, smiling, "death doesn't seem so little a thing to me, Teddy. The fact that it takes you away from this world of sunshine and winds and birds and friends and—just living, makes it a very serious thought, to my mind; for I love all this!" she said, with a vigorous, sweeping motion of the arm, which included all the sunlit tract before her. "But that isn't my point," she added. "I suppose I could reason myself into choosing death instead of life, or doing the hard thing instead of the easy, if it were just a matter of intellectual decision; but you see, when the great moments come, there's all the sudden physical fear and horror; and I'm afraid that these might count for more, at that instant, than my whole lifetime of reasoning about duty and courage. Somehow I've always sympathized with Savonarola for yielding to the awful stress of his suffering; for I have almost a conviction that I should do exactly the same thing myself."

"To me," said Emily, calmly, going back to the original proposition, "it seems the simplest, easiest thing in the world to make the noble, brave choice at any such critical time."

"They say that what we do at supreme moments," Theodore suggested, thoughtfully, stripping the leaves from a green twig in his hand, "is the cumulative result of a lifetime of habit. I rather hope you'll have a chance someday to prove your fears about yourself groundless, Sylvia."

"I do, too; for I should really like to know what I should do," the girl said with a bright smile. "Do you know, I have a theory that there comes a moment in the life of each one of us when the stuff we are made of is tested? And it always braces me up to think of it; not because I'm at all certain how I should use my moment, you know; but I think it is in a way glorious to feel that we are worth so much; that we specks crawling at the bottom of this ether are permitted to come face to face with supreme temptations, and that it is in us once in a while to face them sublimely."

"Not half bad, Sylvia," said the boy,

laughingly, with a little nod of approval. "It is rather like trees; whether they go up or down or sideways is decided at some one critical point. So your 'moments' are not only tests but prophecies."

"I'm sure I don't see what trees have to do with it," said Emily, rising; "and if we are going to ride to Roxbury this afternoon, we would better be getting into our habits."

Five years have made the youth a man, and the girl to whom he gave his boyish liking an earnest young enthusiast in the first glory of womanhood. They walked along side by side through the upland pasture; the sun had gone under, and the strong, damp wind, which they had to face and oppose, brought the bright color to their cheeks, and beat insistently against the girl's cape and the long ends of the scarf which covered her head. The two walked with the glad, buoyant step that indicates "the wild joy of living;" a joy that comes from nothing else so surely as from a vigorous walk across the moor against a buffeting, salt-laden wind.

"You see, Teddy," Sylvia was saying, "if I simply had to marry someone, and let all my ambitions and aspirations go, of course you are the only one I'd think of. I dare say you have discrimination enough to know that yourself. But," she added, raising her head and giving it a quick, characteristic shake, as she turned her bright face towards him, "that case is not supposable. I've never intended to marry, and you have always known it—haven't you?" she added, with an effort at judicial fairness that the young man might have found amusing at any other time.

"You have always said you intended to devote yourself to your work," he admitted; "but a girl isn't usually considered to be on oath in all she says; and we have always been such friends, such comrades, Sylvia!"

"That is just it!" interrupted his companion. "We have always been such understanding friends that I thought you knew me better than you seem to have done. If girls usually say one thing and mean another, then you ought to have known that in that respect I was unlike them. I would rather be sincere than be anything else in the world; and the last thing that I should be untruthful about would be a subject so grave as that of marriage."

"Then you do admit that it is a somewhat serious subject?"

"What more so? It is a question of a life destiny. It is, therefore, of exactly the same importance as the subject of my profession. I rejected the thought of marriage years ago, when I began to study medicine. I have never regretted it, and I never shall. I am all ready now to begin my work, and I am eager for it, and so glad about it, Teddy! It is a great thing to be young and well and strong, and to have a whole world of opportunity for usefulness opening up before me. There can't be anything else in life so much to be desired as the privilege of being useful!"

Her companion looked at her glowing face, and perhaps the man's natural answer was on his lips; but he was wise, though a lover, and knew the futility of argument.

"I suppose," he said, putting out of sight for the time his own heavy disappointment, in generous effort not to oppress her with it, "I suppose you are sorry for me, Sylvia, and wish this had never happened?" and he gave her a half smile which she did not return.

"I am sorry for you now, Teddy," she returned, seriously, "but, after all, this can't be everything to you. You have your own work, just as I have mine, and in that you can be happy at first. By and by you will forget, and will marry someone else. I know it sounds cruel for me to say it, but it will be so. As for wishing this had never happened, I do, on some accounts. On others, I am very proud that it happened, and I thank you more than I know how to tell you." She stopped, as they emerged on the highroad, and held out her hand to him with a frank, sweet smile. He took the hand gravely and retained it for a moment, looking down at it while he spoke.

"I can never care for anyone else as I do for you," he said slowly, "for you have been a part of all the dreams of my life. Your answer is surely final, Sylvia."

"It is surely final, Teddy."

"Then I will not be ungenerous to my rival," he said; "I wish you joy and success in your work. And you may have the knowledge—if it will be anything to you—that it has done me good to know and love you, dear."

Thus they parted.

Another pause of years, and when the curtain rose again Sylvia Wayne was a woman of thirty, and the gaslight was illuminating every corner of her large and well equipped study. Only prosperity could have given the indefinable air of elegance to all the appointments of the room and to the dress and bearing of its occupant. But only a sudden, crushing sorrow could have thus bowed her head upon her arms before the professional-looking desk, and brought about a despairing abandonment to grief, the more striking because so alien to her nature.

While she sat in this attitude, in the pleasant room, so silent in its brightness, a stiff paper fluttered from her hand to the floor and lay at her feet. It bore the announcement of a marriage that had taken place the day before, the marriage of the man to whom she had given her "final" answer on the hillside near her home, hundreds of miles, ages of time, away. Since then, success, good cheer; ambition satisfied, usefulness in plenty; a city prac-

tice, a host of friends and admirers, a noble and dominating purpose crowned; and underneath it all the late but imperious awakening of a woman's heart. Then the growing conviction of the emptiness even of her large and "useful" life; the longing; the unformulated hope; now, this!

"For myself, it is all over," she whispered; "but there is still my father. He is proud of me and loves me—for his sake."

A soft knock at the door and a maid entered, carrying a little silver tray.

"Here are letters for you, Dr. Wayne," she said; and withdrew.

With a dreary gesture, Sylvia took up and opened mechanically one of the two envelopes which had been laid before her. It was a letter from her father, who had gone to a distant land in search of the health which at home had failed. Sylvia Wayne read like one who has entered a chamber of horrors, yet only half comprehends. It was a confession; his life was nearly spent, and he could not die without ridding himself of his burden, the burden that had broken him down in health and sent him away on his long journey that he might not see his daughter's sincere and trusting eyes. He was guilty, a dishonorable man; in his position of trust he had taken what had not been his; he has been, he was, no better than the commonest thief. When he died—it would be soon—he would leave a memory of dishonor to his daughter and a debt that could never be paid.

The other letter, written a few days later, was from her father's agent in Calcutta, giving particulars of the latter's death.

Far into the night sat the stricken woman, a few hours before so young and buoyant and full of hope, gazing straight before her into the dying embers of the fire. Her hands lay clasped in her lap; her face was like a mask of stone, and her eyes were devoid of expression of any kind whatever, whether of sorrow or suffering or even despair. There is a point beyond which one ceases to cry out, and the bodily frame recognizes its inadequacy to express the anguish of the spirit. A tiny clock at the other end of the room gave the stroke of one, which fell with startling distinctness upon the surprised silence.

Then Sylvia turned, with a strange and marked calmness, to her desk. From a carefully selected phial she took a number of small tablets and, dropping them one by one into a curiously shaped goblet half full of water, held it up between her eyes and the light with unshaking hand, and watched the opaque whiteness dissolve. Then she walked to the mantel before the grate, with the glass in her hand, and stood there looking down, once more, into the heart of the few remaining embers. Finally, with a sad little half smile she raised the goblet to her lips and held it there for an instant—then suddenly, with the old-time characteristic shake of her bright head, she inverted the glass so that the contents hissed upon the hearth. She stood up straight and lifted her eyes, and her face was illumined by the light of a beautiful courage and resolve.

"No, I will live!" she said, in a clear, resonant voice. "To pay this debt of his, to clear his name. For honor's sake!"

Thus, unheralded, unrecognized, came and passed the one sublime moment of her life, and her early question was answered.

The pencilled words on the scrap of paper Hilliard had given me were these:

"The reason I have been permitted to know so intimately some of the details of Sylvia Wayne's life, is that she afterwards became—my stepmother!"—*Evening Post.*

VARIETIES.

THE LADY—I'll give you a good meal if you will cut up some of that wood. The Tramp—Sorry, but I can't accommodate you, madam. "Too lazy to work, I suppose?" "Not that, madam, not that. I would be false to my trust. You see I'm a member of the Society for the Preservation of the American Forests, and we never cut any wood."—*Yonkers Statesman.*

A MAN in the vicinity of Newburyport, Mass., was taken ill, and his wife, in her search for remedies came across a box of little black pills, which she thought were liver pills. These she gave faithfully to her husband, who improved under her care. In about a week, when he had taken all but one or two of the pills, the husband happened to turn the box over. He gave a yell that startled the whole neighborhood. His wife ran to him, thinking that he was dying. "Look," he cried, "read what it says on the bottom." She did as he bade her. And this is what she read: "Prime crown morning-glory seeds."

HERE is a drouth story told by a traveling man: I was driving across the country to a little town in Western Kansas the other day, when I met a farmer hauling a wagonload of water.

"Where do you get water," said I. "Up the road about seven miles," he replied.

"And you haul water seven miles for your family and stock?"

"Yep."

"Why in the name of sense don't you dig a well?"

"Because it's just as far one way as the other, stranger."

"THE Scottish American" tells a story of a cobbler who was sentenced by a Scottish magistrate to pay a fine of half a crown, or, in default, twenty-four hours' hard labor. If he chose the latter he would be taken to the jail at Perth. "Then I'll go to Perth," he said, "for I have some business there." An official conveyed him to Perth, but when the cobbler reached the jail he said

he would pay the fine. The governor found he would have to take it. "And now," said the cobbler, "I want my fare home." The governor demurred, but discovered there was no alternative; the prisoner must be sent at the public expense to the place he had been brought from.

WHAT IS WANTED IN KANSAS.—In discussing the question in Western Kansas not long ago, a citizen from the short grass country said: "I think that Kansas is in need of a good deal of irrigation. There are times when it is so dry in the western part of the State that you have to soak a hog over night before he will hold swill. There are places where water is wet only on one side. I know a place where the owner of a ferry boat hauls water eleven months in the year to keep his ferry running. Why, water is so scarce there that the men won't drink it. The cause of this drouth is that the railroads of Kansas have cornered the water supply of the State to put into their stock."

HARD TO SATISFY.—The son of a well-known Providence lawyer came home at the end of his first term in college exulting in the fact that he stood next to the head of his class. His father was less easily satisfied. "What! Next to the head?" he exclaimed. "What do you mean, sir? I'd like to know what you think I send you to college for? Next to the head indeed! Humph! I'd like to know why you aren't at the head, where you ought to be!" The young man was naturally crestfallen, but upon his return to college he went about his work with such ambition that the end of the term found him in the coveted place. He went home very proud indeed. It was great news. The lawyer contemplated his son for a few moments in silence; then with a shrug of his shoulders, he remarked: "At the head of the class, eh? Humph! That's a fine commentary on Brown University!"—*Youth's Companion.*

THE citizens of Guthrie, Okla., determined recently to present medals to three young men who had shown bravery in rescuing people during the flood. A young woman who was getting subscriptions for this purpose came up to a group of several young men, among whom was McCartney, one of the men for whom the medals were to be procured.

"Boys, I'm collecting money to buy medals for McCartney, Willis and Platt. Will you help?"

"Yes," replied McCartney, with a wink to his companions, "but, while I'm willing to help in getting medals for Willis and Platt, I don't think McCartney deserves one. He simply fell into the river and had to be helped out."

"Well, between you and me," confidentially responded the subscription-taker, "I don't think so either, but folks are afraid he might feel hurt if he was left out, so they counted him in."

SENATOR Billy Mason, of Illinois, is something of a story teller himself. Here is a fresh one from him: Pat McCarty gave a dinner to which he invited three or four of his neighbors. Pat had allowed his wife to cook only one chicken. When dinner was served Pat took possession of the carving knife, and in a most hospitable tone said to Mrs. Dugan:

"What part of their fowl will yez have?"

"A leg if yez please," was the answer.

"An' what part will yez have. Would yez loike some av ther white?" Pat inquired of Mrs. O'Hooligan.

"An' a leg will do me," she answered, as each answered the part of the fowl she desired was given her.

"What part will yez have, Molke Walsh?" Pat blandly inquired of his neighbor.

"O! balave O! will take a leg, too," said Molke, in his most modest way, wishing to follow in the footsteps of the company.

"Begorra," said Pat to Mickey, "what does yez think O!m carving—a spider?"

Commencement time's a-comin' an' Dick's goin' ter graduate: He'll make a speech in Latin an' jest paralyze the State! He tackled all the languages an' larnt 'em in a flash: But he always talks in English when he's writin' home fer cash!

He says that Greek's as common as the daisies in the dew: He kin run a race in Latin—dance a jig in German, too!

An' French is on his bill o' fare, an' won't he cut a dash? But he always talks in English when he's writin' home fer cash!

I reckon it's a comfort jest to know the boy can speak In all them foreign languages, an' gallop 'round in Greek: But his wisdom's more amazin' fer he changes in a flash. An' he always talks in English when he's writin' home fer cash!

—Atlanta Constitution.

Christian Endeavor Rates to California.

Mr. Walter G. Robinson, State Transportation Manager, Y. P. S. C. E., announces that the Michigan Central has been selected as the official route from Michigan in connection with other routes from Chicago of the Y. P. S. C. E. to the San Francisco Convention. A special train will start from Detroit at 9:00 a. m. Tuesday, June 29th, stopping at all principal stations, also at junction points, to enable all who will avail themselves of this splendid opportunity of going to California to travel to Chicago together. Very low rates have been secured and Mr. Robinson will be pleased to give all who will join his party full information about the trip. Address him at Detroit.

The Dairy.

We have a complete Dairy and Farm Creamery in constant operation on the Experiment Farm at Climax, Mich. This is personally conducted by J. H. Brown. All dairy correspondence should be sent to Climax, Mich.

For the Michigan Farmer.

A HOME-MADE COW STABLE.

During the past year the writer has noticed several plans given through the FARMER for constructing a practical cow stable, and with the permission of the editors we will submit ours. We do not wish to claim any originality in the matter. What we have, for the most part, is the result of observation, and a more or less careful study of the matter.

About four years ago it became necessary, partly to get more room as well as greater convenience, to make a change in our method of stabling. The original idea upon which our basement stable was constructed was the pit theory.

The stable proper consisted of a huge concavity going to a depth of two or three feet below the floor proper. The mangers were placed sufficiently high so that the rougher portion of the stable manure was allowed to remain and accumulate during the winter months, fresh bedding being added as often as required. This method was unsatisfactory in more ways than one. It necessitated the use of a great deal of straw, required a great deal of labor, and did not keep the stock in as satisfactory condition as desired. These, with other reasons, caused us to look for something different, and we selected troughs and blocks.

We have used this method of stabling now for three or four years with entire satisfaction. It is far in advance of the former method and compares very favorably with anything we have ever seen. As an economizer we can not say too much in its favor. Compared with our old stable it doesn't require more than half the bedding to keep the cattle in a practically clean condition; when cleaning stables it doesn't seem as though it takes more than a third of the time or work.

One of the first things necessary for us to do was to fill up the old pit. This was done early in the spring when we spent a day with a couple of teams hauling in some good heavy clay soil. This new dirt was leveled down and used as the floor of the stable until October when we were ready to put in our new stable. By constant use the clay had become what is quite necessary—compact and hard.

The first thing in laying the block, etc., is to make the general plan for the stable. We did this by first locating the line to form the front of the mangers and then measuring back the desired distance to locate the trough. This distance must be regulated according to the size of the cattle kept. We keep a medium-sized Durham grade, and made the distance from front of manger to trough from seven feet to seven feet and a half. This space includes standing room and manger.

Our troughs are of hemlock, seven inches deep and sixteen inches wide, and vary in length according to position. The first two feet directly in front of the trough, under hind feet, is paved with blocks, and all standing room back of troughs is also paved. The space between the two feet of blocks and the manger is filled with clay and gravel, which after being used for some time becomes very hard.

Something must be provided to drain the troughs. We use two small cisterns for this purpose which are connected directly to the troughs. Our cisterns are two feet deep, eighteen inches wide and three feet long, inside measurement. They are bricked up and carefully cemented on inside to prevent leakage. The tops are covered with planks, making them level with the surrounding blocks.

For blocks we used tamarack cut six inches long. Doubtless cedar would be better for those who have it. It is quite necessary that the blocks should all be of the same length and cut as square as possible; otherwise it will prove difficult to make the floor smooth—a quality which is obviously very important at cleaning time. It will prove very difficult for any two men to saw them by hand and get anything like truthness.

The writer would recommend as the most satisfactory way in the end, to use the buzz-saw. By taking an ordinary buzz-saw frame and bolting a short piece of two by four at a point six inches from the saw, to be used as a gauge, the work can be done very quickly and easily and an exactness procured that is practically impossible any other way. To anyone the writer would say, think twice before you undertake to do the sawing by hand. Unless you are an ultra expert, you will not be at all pleased with the final result.

It will not prove at all difficult to lay the blocks. First see that the ground is properly packed and shaped. You will need the upper surface of the blocks to incline slightly towards the trough rather than away from it; give your ground surface the same inclination. An old ax with the handle partly sawed off will prove very convenient in splitting blocks while putting them down. All blocks must be settled securely into place or a disagreeable sagging will result.

After we had fitted our blocks in as compact as possible, we filled the remaining crevices by taking a hoe and working the cracks full of gravel. The result is we have a stable floor very firm, yet not dis-

agreeably hard to stock; also one that is not at all difficult to clean and at the same time very durable.

Many persons differ in regard to stalls. Some advocate single stalls, while others the double ones, partitions six feet apart. We use the latter and think that we prefer them to any other. Our mode of tying is by means of the bar and chain. This arrangement is far ahead of ropes, and renders the stock practically just as safe as in stanchions.

SHIAWASSEE CO., Mich. C. P. REYNOLDS.

GROWING AND FEEDING SOILING CROPS.

Soiling crops may be divided into two classes; those sown or started the previous season, and those sown in the spring. Of the first class, rye is the earliest. If sown early on rich soil it can sometimes, in northern Ohio, be cut by April 20 or May 1. Its chief value lies in its earliness. Its season does not extend over two or three weeks. By the time it is fully headed out it becomes hard and unpalatable and stock will not relish it.

By the time rye is past its best, wheat can be used until clover is in bloom. Wheat is a little more expensive, but it makes a better feed. Stock relish it very much, and will eat it up clean until nearly ripe. Both rye and wheat, when cut early, will make a second growth, from a fourth to half as much as the first crop, depending upon the season. Clover is, however, our main dependence for early summer feed. It is a well-balanced ration and one of the most productive, cheapest and most satisfactory forage plants the farmer can grow.

The possibilities of an acre of clover on rich soil are very great. I have cut the common red or medium three times in a single season without apparent detriment, the second season's growth being as heavy as the first. While it will not produce as many tons per acre as Indian corn, it costs less to grow it since it requires no special preparation of the soil, and no cultivation while growing.

Of the spring-sown crops, oats and peas can be sown the earliest. They are both very hardy and on high ground, when there is no danger of standing water, will stand a great deal of bad weather unharmed. I have known oats to lie in the ground four weeks, and come out all right. We use the Canada field pea and sow about a bushel per acre, and at the same time sow about a bushel of oats per acre. It is best to sow them separately. The peas being heavier than oats, it is difficult to sow them evenly after being mixed. Peas should be sown quite deep. Some recommend plowing them under about four inches and sowing the oats afterwards, either broadcast or drilled. We sowed about two acres of oats and peas, March 20, and they are growing nicely. They can be sown as late as May and yet do well. Peas are very rich in nitrogen and are a valuable feed for milch cows and pigs.

All soiling crops should be grown near the stable for convenience in feeding. It is advisable to feed the milch cows in their stalls, about milking time. The feed for young cattle should be put in racks or mangers—out doors if preferred—but never thrown promiscuously on the ground, much of it to be wasted. On a small farm a wheelbarrow or hand-cart can be used for transporting the feed; on a larger farm, where the amount of feed handled is much more, it will be necessary to use a team and wagon. We constructed a truck from four old reaper or mower wheels at a very little cost that answers the purpose admirably. We drive into the floor above the stables and dump the feed through a chute into the feed-room below. When feeding corn, during August and September, it is first run through a feed cutter on the same floor, the carrier conveying it into the then empty silo.

For fall feeding, either in complete soiling or as a supplement to the failing pastures, there are few crops more satisfactory than corn. Many farmers make great mistakes in planting it. They sow it broadcast or drill it thickly with a common grain drill. It makes a large amount of feed when planted this way, but the quality is not of the best. Any forage plant, to develop into first-class feed, must have air and sunshine. When too much crowded it gets a pale, sickly color, especially near the ground, and is of little value for feed. It is too watery. It lacks the deep, rich, green color that the same variety of plants get when not planted so thickly. It is also much more liable to lodge, which makes the harvesting more difficult and expensive. It has the advantage, however, of not requiring any cutting before feeding.

When corn is planted rather thinly the stalks will be large and heavy and will nearly all produce an ear. In order to feed without waste, it should be cut. We have tried both the native and large southern varieties, and in the future will plant nothing but the southern or "B. & W." variety. It produces about one-half more feed per acre, and I see no reason why the quality is not equal to any. Some advocate planting sweet corn, but after having tried it, I find nothing in its favor unless one is situated near a market for green corn; then by planting very early, the ears could be sold to a good advantage and the remainder fed to stock. It does not grow so tall, and must be planted closer, making the expense for seed some greater.

We tried sorghum several years ago, but did not like it as well as corn. When sown in drills about as thick as ordinary field corn, and cultivated, it does fairly well, but grows very slowly at first and resembles grass so much that it is difficult to keep it clean. If sowed or drilled thickly it is open to the same objections that corn is. Corn

is beyond a doubt the best and cheapest feed for fall sowing and winter feed in the shape of silage. Producing such an enormous amount of feed per acre, it will continue to be our main crop until we find something better. We always sow the ground to wheat or rye after the corn is removed. The continued cultivation necessary for the benefit of the corn is an excellent preparation for the fall seeding. It is like a summer fallow. It is cultivated and drilled without any further preparation. I believe it is best not to plow it. The soil being compact and fine, makes a very good seed-bed. If plowed during the hurry of fall work it is apt to be sown without sufficient preparation, to the injury of the following crop.

The use of the silo in connection with soiling is gaining favor. Some use a silo large enough to hold feed for the entire year, and depend upon corn entirely for filling it. This may or may not be the best plan. I am certain it would be very convenient to have the feed all prepared and under cover, when access can be had to it at all times regardless of the state of the weather. When depending upon bringing in the feed every day or every second day, it sometimes happens that it is rainy and disagreeable. On the other hand, I would suppose that stock would tire of one kind of feed the entire year, even though palatable as silage, and not eat readily. Animals demand a variety of feed to do their best, and it pays to cater to their demands. The making of silage from clover and rye for summer feed has been tried with but partial success. Experiments at different stations have not been as successful as was hoped.

STARK CO. O.

O. J. VINE.

THE HOME DAIRY.

The amount of ignorance displayed on the dairy question is surprising, in view of the facilities for obtaining information. Most agricultural papers have a dairy department, competent men speak on the subject at our institute, and most neighborhoods have at least one progressive dairyman, but with the great majority of farmers the home dairy is still a comparatively primitive affair. Farmers, as a rule, have adopted modern or advanced methods in all other branches of husbandry, but stick to the old ruts in the dairy.

Recently I asked a grocer whether there was any improvement in the butter he bought, over years past. "No," said he. "I have been in the business over 18 years and have handled thousands of pounds of farm butter every year, and the butter is actually getting poorer in quality. A few of my customers have improved in butter making, but the majority have not."

Farmers say that the low price of farm butter is responsible for this; that they cannot make it for the price. They lose interest, and don't care only so that they get their surplus off of their hands—overlooking the fact that the fault is their own, that they alone are responsible for the low price. Conditions and circumstances have something to do with the question, but not near so much as people think. I have a friend in Ohio, who made butter that brought 25 cents per pound the year round, whose dairy room during the summer season was the shade of a clump of plum trees. Here they had a tank with cans in which they set the milk for creaming. The water used in cooling the milk was carried from the well, perhaps 200 feet distant. The churning was done early in the morning, before the sun got warm. Every detail was looked after. And they made as good butter as can be made anywhere. They now have a separator, but I do not think they make a better quality of butter than they did with all their former disadvantages.

But I have another friend who, at an expense of over \$300, built a modern milk room—cement floor, cement tank, everything convenient and up-to-date; water for cooling the milk was pumped by a wind wheel; swing churn, etc. One would quite naturally expect that with these advantages their product would be of the best quality. But it is not. They trade butter at the store, at store prices, which meant, this last winter, 8 to 10 cents per pound. I will explain how they get such poor results. No milk is skimmed until every can and empty pail about the place is full of milk, when the skimming is done on a large scale. The cream on the first set is already over-ripen when taken from the milk, and is mixed with the cream from more recent set milk, and the whole mess set aside to await for a favorable wind that will run the wind wheel, as they churn with wind power.

Not long ago these friends visited us, staying all night. Our conversation quite naturally drifted to dairying, as we were both interested in the work, and during our talk the lady made the remark that she had put the cream in the churn and thrown the wheel in gear before she left home, and she did hope the wind would rise so the churning would be done by the time she got back. At first we thought she was joking, as we did not know anything of their methods at

that time, but she assured us that it was a fact, and that it was often three or four days after the cream was put into the churn before it was finished, depending altogether on the wind. Sometimes when the weather is calm for several days there will accumulate two or three churnings of cream, all waiting for favorable winds to sail into butter. After the butter is churned it is put into a large tin pail and well worked with hands, then set aside to wait awhile, after which it is salted, again worked with the hands and prepared for market. Everything about this dairy is done on this system. No money in dairying, they say, not thinking that the fault is their own.

The above two cases represent extremes. I relate them to bring out the point that success in dairying depends more on those engaged in the work than on other conditions. Conditions, I admit, are not always favorable, but to overcome adverse conditions is not only man's privilege, but his duty. I am sure that in nine cases out of ten these unfavorable conditions we hear so much about are only imaginary, or can be easily changed or overcome when we once determine to do so.

LABETT CO., KAN.

M. E. KING.

Hood's Pills

Best to take after dinner; prevent distress, aid digestion, cure constipation. Purely vegetable; do not gripe or cause pain. Sold by all druggists. 25 cents. Prepared only by C. I. Hood & Co., Lowell, Mass.

CREAM SEPARATORS.

De Laval "Alpha" and "Baby" Separators. First—Best—Cheapest. All Styles—Sizes. Prices, \$50 to \$800.

Save \$10 per cow per year. Send for Catalog.

THE DE LAVAL SEPARATOR CO., RANDOLPH & CANAL STS., 74 CORTLANDT STREET, Chicago. New York.

SILOS

How to Build. WILLIAMS MFG. CO., KALAMAZOO, MICH.

LANDS FOR SALE. Four (4) to forty (40) acre lots within five (5) miles of the city of Saginaw, at \$1,000 a forty (40). Good, rich soil, and can be cheaply cleared up. Three of them could be put into crops this fall. Forty (40) acre lot within three and a half miles of the center of the city, which is all fenced and under crop. Soil of the best quality. This place can be bought for \$2,400. Eighty (80) acres within two and a half miles of Layton's Station, Isabella county. Sandy loam and clay sub-soil 88 per acre. With reasonable payment down, deferred payments can be made satisfactory to purchasers. Inquire of

319 Genesee Ave., Saginaw, E. S. Mich.

Wabash Line

THE SHORT ROUTE

—TO—

Chicago, St. Louis & all points West.

Home-seekers and California tourists, write

R. G. BUTLER, D. F. & P. A., 9 Fort St., West. (Hammond Building)

Detroit, Gd. Rapids & Western R. R.

(FORMERLY DETROIT, LANSING & NORTHERN).

And Chicago and West Michigan Railway.

Popular routes between Detroit, Lansing, Bay View, Grand Rapids, Petoskey, Manistee, Muskegon.

Trains leave Detroit, Fort St., Station, as follows:

For	A. M.	P. M.
For Lansing and Grand Rapids	8:00	1:10
For Grand Rapids and Lansing	8:00	1:10
For Muskegon and Traverse City	8:00	1:10
For Petoskey	8:00	1:10
For Big Rapids	8:00	1:10

Arrive at Detroit 11:40 a. m., 5:40 and 10:30 p. m.

Daily except Sunday. Parlor cars on all trains.

City Passenger and Freight Office, 7 Fort St., west, Detroit. Phone 368.

BLAINE GAVETT, Dist. Pass'r Agent.

JAMES AUSTIN, Commercial Agent.

GEO. DEHAVEN, Gen. Pass. Agent.

GRAND TRUNK RAILWAY SYSTEM.

Depot foot of Brush St. City office, 84 Woodward Ave. Telephone 32.

LYC. EAST VIA PORT HURON. APT

LYC.	EAST VIA PORT HURON.	APT
7:55 am	Mt. Clemens, Pt. Huron & North	9:40 am
10:15 am	Toronto, Montreal and Portland	8:25 pm
1:05 pm	Mt. Clemens, Pt. Huron & North	1:30 pm
4:20 pm	St. Clair, Romeo and Pt. Huron	6:00 pm
10:35 pm	Buffalo, Toronto and New York	6:45 am

EAST VIA WINDSOR.

EAST VIA WINDSOR.	APT
7:45 am	Buffalo, New York and Boston
12:00 pm	Toronto, Buffalo and New York
6:40 pm	London and Inter Stations
11:25 pm	Suspension Bge, Buffalo & N. Y.

DETROIT AND MILWAUKEE DIVISION.

DETROIT AND MILWAUKEE DIVISION.	APT
7:55 am	Saginaw, Gd Haven & Muskegon
11:30 am	Gd Rapids, Gd Haven & Chicago
4:05 pm	Saginaw, Gd Rapids & Milwaukee
6:45 pm	Pontiac & Intermediate Stations
8:00 pm	Lansing, Battle Creek & Chicago
10:45 pm	Gd Rapids, Gd Haven & Muskegon

*Daily except Sunday. *Daily.


When writing to advertisers mention Mich. Farmer

Mind this. It makes no difference,

RHEUMATISM

Chronic, Acute, or Inflammatory

of the Muscles, Joints, and Bones is cured by



TRY OIL

THE MICHIGAN FARMER,

—AND—
State Journal of Agriculture.

THE LAWRENCE PUBLISHING CO.,

EDITORS AND PROPRIETORS.

M. J. LAWRENCE, - - - President.
M. W. LAWRENCE, - - - Vice-Pres.
M. L. LAWRENCE, - - - Secretary.ROBERT GIBBONS..... Associate
J. H. BROWN..... Editors.Nos. 11 and 13 Rowland St.,
DETROIT, MICH.

TERMS OF SUBSCRIPTION:

ONE YEAR, Postage paid.....\$1.00
SIX MONTHS, "......60

N. B.—We will always stop sending paper when the time for which it is paid has expired, so that, to avoid missing any numbers, all should renew promptly.

Always send money by draft, postoffice money order, registered letter, or by express. We will not be responsible for money sent in letters. Address all communications to, and make all drafts, checks and postoffice orders payable to the Lawrence Publishing Co.

ADVERTISING RATES:

Regular Ads. per line, each insertion.....25c.
Business notices, solid minion, charged count.....50c.
Regular Reading Notices, set in reading matter type, charged count.....60c.Special location, 25 per cent extra.
No Ads. inserted for less than 75c per insertion.
Cuts and double column Ads. inserted at regular rates for space occupied.Ads. displayed or leaded to suit advertisers, but are charged per line solid Agate measurement, or \$2.50 per inch each insertion.
No Lottery, Quack Doctor, or Swindling Advertisements inserted at any price.

SCALE OF DISCOUNTS.

The following discounts will be made on orders sent at one time for one advertiser, amounting to \$20 or over, to be completed within one year:

20 and under \$50.....5 per cent.
50 " " 100.....10 " "
100 " " 200.....15 " "
200 " " 300.....20 " "
300 and over.....25 " "
No deviation from above rates.

DETROIT, SATURDAY, JUNE 12, 1897.

This paper is entered at the Detroit Postoffice as second class matter.

THE government of New South Wales has expended over \$4,000,000 within the past seven years in attempting to exterminate the rabbit pest. This sum does not include the amount expended by private citizens and landowners, and is said to be trifling compared with the losses inflicted by the rabbits during the same period. Yet the "sports" wanted the Legislature to make it a misdemeanor, punishable by fine, for farmers to protect their field crops and orchards against their attacks. They will be wanting a law to protect potato bugs or cabbage worms next.

THE tax levy for this city for 1897 will be \$3,640,873, as compared with \$3,253,300 in 1896, an increase of \$387,577. The rate will be \$17.68 per \$1,000, or \$2.08 more than in 1896. It is not too much to assert that with a fair salary list, only enough employees to do the business of the city, and the exercise of a little economy on the part of the heads of the various departments, the levy could be cut down 25 per cent, and not a single material interest suffer in consequence. Fully a quarter of the taxes paid by citizens is eaten up by political parasites or squandered by those who have charge of the funds.

REPORTS regarding the season in Great Britain are anything but favorable to farming operations. One journal says that "with the harsh and inclement weather thus early in the season, the yield of the hay crop is considerably discounted. A genial 'growthy' month of May would have put some activity into the live stock trade, whereas at present all who can afford to wait are doing so. But a brisk business in the near future may still be expected, especially in sheep." Another one observes: "With the sharp frosts of last Thursday and Friday it need hardly be said that meadows and pastures experienced another serious check, and the favorable forecast that even as recently as a week ago seemed warrantable with regard to the approaching hay crop must now, at mid May, be modified."

THE preparations for the Queen's Jubilee in England are proceeding, and arrangements are so far ahead that some idea of the big show in London can be had. Over one million visitors are expected in that city, and the question of how they are to be lodged and cared for is being discussed. The *Meats Trade Journal* says the questions of food and lodging for visitors are the two great problems of the Jubilee. If the British public will just order ahead what they want it will be furnished, no matter how large the order is. We have food enough waiting for market that we can contract to furnish two jubilees, if necessary. Perhaps Americans visiting London while the show is in progress will avoid trouble by taking their rations with them.

THAT WOOL SCHEDULE.

Mr. Theodore Justice, in reply to our criticisms upon his statements regarding the wool schedule, sends us a copy of a circular letter which the firm of which he is a member, addressed to the U. S. Senate upon that subject. In that letter we find the following statements:

"We invite your careful examination of the enclosed diagram, which demonstrates from actual trial of the last four tariff laws, that a duty of more than 10 cents per pound upon wools of the first class is needed in order to restore the flocks which have been destroyed during the past four years. You will observe from the diagram that when the duties did not exceed 10 cents per pound our flocks always decreased, and when the duties were above 10 cents per pound they increased.

"This subject, illustrated in the enclosed diagram, was discussed at length in the wool tariff hearings before the committee of ways and means by our senior partner. It can be found in the printed copies of tariff hearings on schedule K under the title of 'The McKinley law was not too high.'"

"According to the standard wool circular of Messrs. J. L. Bowes & Bro., of Liverpool, under date of May 19th, Port Phillip unwashed superior is to-day worth 22 cents, or only eight-tenths of one per cent less than the average value of the past eleven years. Port Phillip unwashed superior, more than any other imported wool, competes with the best wools of the United States. Therefore, the protection that was needed in 1890 is required now.

"The object of this is to correct the wrong impression which senators are likely to receive from the public statement of an influential member of the Finance Committee when he said, in substance, that a duty of 10 cents per pound at this time was equivalent to 10 or 20 per cent more protection than had been furnished to the domestic wool-grower by any previous tariff law at the time of its enactment. The influence of this grave mistake, if not promptly corrected, may inflict serious injury to domestic sheep husbandry. The restoration of the rates of the House bill upon wools of the first and second class is the very least protection that should now be considered."

The above letter was accompanied by a printed diagram showing the relative cost of the scoured pound of American and Australian skirted fleeces. While the figures on shrinkage given may be true in some instances, we know that they are not in many that have come under our notice. Attached to this diagram is an article giving reasons why an extra duty upon skirted wools could not be collected, and we give some extracts so our readers can understand how the laws are administered by a lot of public officials with a life tenure of office under the civil service rules:

"The above table shows that under the Dingley Bill as it passed the House with a duty of 11 cents on the best grade of skirted Port Phillip greasy fleece, the lowest scoured cost would be 66 cents per pound, and the price of American wool would be based upon this, for the value of wool sold by the farmer is computed on its yield of clean scoured wool, but the scoured cost of this same wool under the Senate amendments if imported at a duty of 8 cents unskirted, or 9 cents with the skirts torn off, would be not over 62 cents; in fact, owing to the ease with which importers can escape the higher duty, the bulk of these imported wools would cost only 60 cents scoured clean, as shown in that portion of the table marked with a hand; therefore, 60 cents under the amendments of the Finance Committee would be the basis of value for clean American wool, as against 66 cents with the House rates. The practical working of such a law as amended by the Committee would result in lowering the scoured value 6 cents per pound and consequently reducing the protection to that extent on the only classes of wool produced in America.

"Experience has shown that where there are two duties, one higher than the other, the great bulk of importations are always made at the lower duty. Thus it will be again if unskirted wools are admitted at a lower duty than those which are skirted, for even the latter will come in at the lower duty of the unskirted, as the provision providing a penalty of one cent a pound upon skirted wools cannot be successfully administered. Wool examiners cannot always detect the difference, even if disposed to do so; the wool-grower, for whose protection this feature is provided, would receive no advantage from it, and it would be an incentive for false invoicing, undervaluation and fraud. The only way to secure adequate protection to the grower against the light shrinking skirted wools is to have but a single duty, and that single duty should be high enough to be adequately protective against the competition of skirted wools, leaving the unskirted fleeces to take care of themselves. There is no better or more practical way to equitably provide for adequate protection against skirted wool than by restoring the rates of the House Bill on wools of the first and second classes."

So the wool schedule must be adjusted upon a false basis because the officials charged with enforcing its provisions are either too ignorant or too dishonest to perform their duties. We ask the attention of the Secretary of the Treasury to this

unconscious arraignment of his officials as either ignorant or dishonest. Also to the statement that importers are continually defrauding the government out of its revenues. Is it not singular that in all the schedules of articles included in the tariff bill, wool is the only one which must be treated unjustly because of the dishonesty of importers and the ignorance, or worse, of the customs officials. Yet we say it, and say it advisedly, that under any fair examination of imports there is nothing which can be more readily and surely detected than whether or not a fleece of wool is "skirted." Anyone who ever examined a whole fleece, can tell a skirted one at a glance.

But Mr. Justice undoubtedly thinks the statements given above should commend him to wool-growers as a friend. Let us look into the matter a little. He asks for a single high rate of duty as the only method by which wool-growers can hope to secure adequate protection to their industry. This looks like good advice, and perhaps it is if customs officials are either imbeciles or frauds. But look at the position in which it places the wool-grower: At the nominal rate of duty he gets 11 cents protection, but in reality only six cents. Then the manufacturer gets two and a half to three times the nominal duty on unwashed wool as compensatory duties upon his goods, or from 27½ to 33 cents per lb., when he pays only 15 to 18 cents. The manufacturer then claims that it is the high duty on wool which renders high duties on goods necessary, and shifts the odium from his own shoulders to those of the wool-grower. Thus the latter is swindled out of what he is promised, the manufacturer swindles both him and the consumer, and wool growing is pointed out as a horrible example of the failure of protection to aid an industry. It is simply a big game of stealing, aided by able-bodied lying on the part of the beneficiaries of the iniquitous methods which Mr. Justice acknowledges pervade American customs houses.

Again, Mr. Justice goes into a long argument to show that Australian "skirted" fleeces are only worth one cent more per pound to the manufacturer than unskirted, and he gives the shrinkage of skirted fleeces at 50 per cent, and unskirted at 53. The *Boston Wool Reporter* (manufacturers' organ) quotes sales of skirted Australian wools, to shrink 45 per cent, at 26 cents per pound in the London market. Ordinary skirted Australian wools are quoted at 24 to 28 cents per pound in the Boston market, while the choicest XX and above Ohio fleeces (washed) are quoted at 22@23c, showing in the most positive manner that these skirted fleeces are of much lighter shrinkage than the lightest washed American Merino fleeces. Now, no one knows these facts better than Mr. Justice, and he simply befools the question with figures on shrinkage and scoured values to mislead wool-growers. Take this extract from a letter written by Joseph Walworth, of the Pacific Mills, Lawrence, Mass., to S. N. D. North, Secretary of the National Association of Wool Manufacturers, and published in their quarterly report of September, 1896, and see if it does not bear out every contention we have made as to the value of Australian skirted wools:

"The introduction of Australian wool during the last two or three years has been a revelation to many American manufacturers. They have received the wool all coming—no dung, no skirts, no strings, no britch, no stuffings, no chaff, but only a sort. All above 'off sorts' are packed and sold separately as skirts, seedy, etc."

We charge, and know whereof we speak, that there exists a combination between certain manufacturers, eastern wool dealers, and members of the House and Senate from various eastern states, to deceive and swindle wool-growers in the interests of manufacturers, and that the scheme is aided by the fact that the wool-grower has not a single well posted representative in Congress to defend his interests or point out the fallacies and falsehoods of his opponents. He stands alone, and is being robbed by the very men he helped place in power.

THE strawberry crop has been a disappointment. Frost and continuous rains spoiled the quality and cut down the yield, while the cold weather injured the demand to a material extent.

THE Torrens land law passed by the last Ohio legislature has been declared unconstitutional by the supreme court of that State.

THE RELATIONS OF THE UNITED STATES WITH SPAIN AND CUBA.

The strained relations, which have existed for over two years between this government and Spain, are very likely to culminate in a positive rupture. The report of Gen. Lee upon the arrest, imprisonment, and probable murder of Dr. Ruiz, an American citizen resident in Cuba, is well calculated to exasperate even those Americans who have urged the necessity of the United States keeping entirely neutral in the struggle between the citizens of Cuba and the Spanish government. We have always maintained that the conditions existing in Cuba did not justify the recognition of the insurgents as belligerents, no matter how strongly we might sympathize with them in their struggle to free themselves from the rule of a most tyrannical and unjust government. We hold to that opinion yet. There can be no recognition of a body of insurgents as belligerents until they have established a form of government, and through it exercise control over a section of country in defiance of all attempts to wrest it from them. Until such a government is established and has a permanent abiding place to which agents of other governments may be accredited, there is nothing to recognize.

But a new and distinct question comes up with the Ruiz case. No government worthy of the name will permit its citizens to be arrested, imprisoned and murdered without demanding the amplest apologies and the fullest reparation possible. Failing to secure these, then the most energetic means should be taken to avenge the insults and injustice done American citizens, and do this so thoroughly that an American will hereafter be respected in any country on the globe. There should be no half-way measures, for the work will surely have to be done over again. We believe in making citizens of the United States sacred from injustice or wrong in every portion of the world, and to that end there are no means too strong to adopt when the necessity arises.

Gen. Lee's report states that Dr. Ruiz was arrested on a false charge; he was placed under improper jurisdiction and died before the proper tribunal considered his case, thereby giving him no opportunity to prove his innocence; he was kept in a solitary cell for thirty-five hours in violation of his treaty rights, which limit such confinement to twenty-two hours; he died from congestion of the brain, produced by a blow on the head. Gen. Lee says there are two theories connected with the wound on the head. One, that in a state of mental excitement he ran across the cell as described by one of the jailers and butted his head on the door in a frantic effort to get out. Another, that he was struck over the head with one of the clubs carried by the jailers—by the immediate watchman—who had probably ordered him to cease his cries for relief and for his children, and upon his not doing so, struck him with more force than he intended, or it is possible the blow was delivered to make him confess or give evidence against others.

The General continues:

"It is possible he went mad, and many causes combined to produce such a result. His knowledge of his own innocence, his confinement in a gloomy cell, where he was not allowed to communicate with family or friends, or to send or write. Alone, all alone, the thought doubtless impressed itself upon his mind that he was liable, in the reign of terror then existing in and around Guanabacoa, to be summarily executed at any moment. He loved his wife and children and in the darkness and loneliness of his cell he was constantly crying out for them. The thought that they were but a few rods away and yet he might not see them again or hear the sound of their voices or feel the touch of their lips and hands maddened him and proved too much for the mind of the distracted and unhappy man, and I thought it not improbable as the long hours passed by, it may have given way and left him a madman."

"His wife says his derby hat was all battered up and his clothes greatly torn when returned to her. But whether when bereft of reason he inflicted the blows which produced brain congestion or whether he died at the hands of others, the truth will probably only be known when the hearts of all are revealed—the fact remains, his unjust confinement killed him, and had he been released from incommunicado by the hand of man at the end of twenty-two hours, the hand of death might not have released him at the end of 315 hours, and to-day the widow would have had the support of her husband, and the moans of his fatherless children would never have been heard in the land."

With such a report as the above from its accredited agent, an experienced soldier and an honorable citizen, the duty of the United States government is very plain, and in its

performance there should be no time lost nor any wavering in its policy to demand the most ample reparation and the punishment of the guilty. Nothing less should be insisted upon or accepted.

WHO ARE ANARCHISTS?

The frightful results of a lynching, or public murder, which took place at Urbana, Ohio, last week, contains a lesson which American citizens cannot afford to ignore. A colored man committed a crime—one deserving the death penalty. He was arrested, hurriedly tried, and given the fully punishment allowed by the laws of that State—imprisonment at hard labor for 20 years. Meantime a large number of citizens had become excited over the outrage, and to prevent trouble a militia company was ordered to occupy the jail in which the criminal was confined. A mob made an attack upon the jail, and were fired upon by the militia, resulting in the killing of four men and the wounding of ten others. After the dead and wounded had been cared for the crowd again surrounded the jail, and finally the militia company was withdrawn and the mob allowed to drag out the negro, club him until half dead, and then hang him.

Now the citizens want the sheriff and militia company's officers indicted for firing on the mob, when, as a matter of fact, they were simply engaged in the enforcement of the law, which they were bound to do under their oaths of office. The position taken by the mayor and citizens of Urbana is practically the same as that of the Chicago anarchists. They claim the right to break the laws when they do not suit them, which is simply the principle advocated by all avowed anarchists. Killing a man unlawfully is murder, nothing more nor less, and every individual who took part in that lynching is as guilty of murder as though he had struck down the victim on the public street without provocation. While the negro was a criminal and a law-breaker, the lynchers placed themselves on an equality with him when they hanged him without a legal trial.

If mobs are to rule, where are they to stop, or who will have the authority to stop them? The right to murder by a mob means unrestrained license to robbery and arson—the right to fire a man's home over his head, or murder him and his family. There can be neither peace, law nor order under such conditions. They mean a state of anarchy, and we may as well understand that before endorsing the acts of a murderous mob, or abusing those who seek to enforce the law and maintain order.

A RIGHTEOUS DECISION.

Last week the State Supreme Court handed down a decision which will have the result of putting an end to the discrimination in favor of semi-public institutions being relieved of taxation on the ground that they are benevolent institutions. To understand the whole matter it may be stated that the Board of Assessors of the city of Detroit assessed the property, real and personal, of the Masonic Temple Association at the sum of \$169,000, of the Harmonie Society at \$47,000, of the Arbeiter Society at the sum \$13,340 and of the Detroit Telephone Company at the sum of \$250,000. The common council, sitting as a board of review, held that the property of the Masonic Temple Association, and that of the Harmonie Society was exempt from taxation under subdivision 4 of section 7, act 206, public acts of 1893. They reduced the valuation of the property of the Arbeiter Society two-thirds and of the Detroit Telephone Company to \$25,000. Suit was brought to determine the validity of this action of the common council. The finding of the Court is as follows:

"1. The property of the Detroit Telephone Co. is by law exempt from local taxation. By the act of incorporation, section 8, of act 129, public acts of 1893, telephone companies are made subject to taxation in accordance with act 168, of the session laws of 1881. By this act these companies are required to make a report annually to the Auditor General and the Auditor General, State Treasurer and Commissioner of the Land Office are constituted a board to determine the rate of tax to be levied, which tax shall be in lieu of all other taxes, state and local, and shall be payable to the State Treasurer. It follows that the action of the council in assessing this property for local taxation is void.

"2. The real estate of the Harmonie Society is not exempt from taxation. Howell's statutes, section 4471, especially pro-

vides that the real estate of such associations is subject to be taxed as other real estate.

"3. The property of the Masonic Temple Association, the Harmonie Society and the Arbeiter Society is not exempt from taxation. They do not come within subdivision 4, of section 7, of act 206 above quoted. It is not enough, in order to exempt such associations from taxation, that one of the direct or indirect purposes or results is benevolence, charity, education or the promotion of science. They must be organized chiefly, if not solely, for one or more of these objects."

A large number of the members of the associations and societies named were opposed to the exemption made by the common council, believing it unjust and illegal. But a majority of the members of the common council, with the idea of making themselves solid with the members of these organizations, and getting a reputation for generosity at the public expense, undertook to relieve them of a large part of their taxes, and having the amounts charged back to other taxpayers, on the ground that they were instituted for benevolent purposes. It is true benevolence on the part of such societies and associations to pay their legal taxes and not have the burden shifted to others, and the Supreme Court is evidently of this opinion.

TOO GOOD FOR POLITICS.

A peculiar phase of local politics is seen in the refusal of a business man, Mr. C. M. Burton, of this city, to accept a nomination as alderman, his reason being the class of men elected to that body. "A Taxpayer," referring to this refusal in a letter to the *Free Press*, says:

"Mr. C. M. Burton is right, as things are now constituted, in his refusal to consider a nomination as alderman. His objections are the objections of almost every man of honesty and respectability to take such a position. The bulk of his associates in the council, were he elected, would be of such a character that, being an honest and respectable man of some means, which he has acquired by industry and frugality, any effort on his part to stem the unfaithful expenditure of the taxpayers' money would be sure to meet with defeat by the irresponsible members of the council. He says he hopes our people, the taxpayers, will come to their senses before it is too late. The taxpayers have come to their senses long ago, but they are powerless against the hoodlum element, who are not taxpayers, but who are politically organized, while the taxpayers are not."

To our mind the position taken by Mr. Burton, and endorsed by "Taxpayer," is just as unpatriotic, and fraught with as much danger to the welfare of the city, as the acts of the political leaders who hold seats in the council. Practically such citizens would place the entire control of the city in the hands of those whose methods they condemn. Mr. Burton takes the ground, apparently, that he is too honest to associate with the present members of the common council. Does he expect other honest men to have less respect and more patriotism than himself? We think the reasoning of "Taxpayer" shows a condition of mind which is Pharisaical in the extreme—a thanking the Lord that he and Mr. Burton are not as other men are; and we therefore doubt if "Taxpayer" would add largely to the credit or integrity of the body of men he assails. It is a well-known fact that there are members of the present common council whose reputation as citizens is unassailable—who have held positions in this body without loss of character or self-respect. Does "Taxpayer" fear others would not be able to withstand the temptations incident to the position? Mr. Burton, he says, has acquired some means by industry and frugality. Just so, and he has acquired them through the opportunities afforded him by the city of Detroit, and he owes it to the city that when an opportunity offers to advance her interests he should be ready and willing to lend his influence and assistance. Falling in this he is not deserving of the name of American citizen.

The firm of F. J. Porter & Co., of Ottawa, Ill., has been engaged in furnishing first-class haying tools longer than any other. There is no improvement of value that they do not use and furnish to their customers. They call special attention to their new hay sling. No method of handling hay has ever been found that compares with this as a labor-saving device for putting hay in the mow. Along with this sling we should call attention to the new sling track and carrier. This firm makes the most complete line of hay tools and are also manufacturers of pumps of all kinds. They will send their catalogue with full information to our readers who will take the trouble to write for it.

That Tired Feeling is a dangerous symptom. Hood's Sarsaparilla will overcome it.

NEWS SUMMARY.

Michigan.

The new Grand hotel at Lansing suffered about \$4,000 damage from fire last Monday morning.

Fire destroyed a number of buildings at Durand one night last week causing losses which aggregate between \$4,500 and \$5,000. Six families were thrown out of homes.

The supervisors of Ingham county have instructed the county treasurer to borrow \$40,000 to pay current expenses of the county. Last year the county borrowed \$50,000.

The Ionia, Eaton & Barry Insurance Co., of Ionia, is in the hands of a receiver. The company has been in existence for ten or twelve years and until recently was supposed to be in a prosperous condition.

The proposition to build a new \$80,000 court house at Jackson was recently voted down and now the citizens are about to vote on the question of bonding the county for \$15,000 for repairing the old court house.

The effort to secure a new trial for ex-City Controller Hiram A. Waite, of Port Huron, convicted of embezzlement, has been unsuccessful and he will likely be sentenced by Judge Vance on Saturday.

The Metropolitan Iron & Land Co., controlling the Norrie group of mines at Ironwood, has effected another sale of 100,000 tons of ore and other sales are in process of negotiation which will keep the mines busy during the entire season and also clean up their large stock of surplus ore. This will necessitate the resumption of night operations, which means the doubling of the force and the re-employment of 500 men.

The bill for the improvement of Maple river has been signed by Gov. Pingree and it is expected that it will result in the reclaiming of thousands of acres of swamp land. To pay for the improvement there is appropriated some 1,400 acres of returned State lands in the southern part of Gratiot county. These lands are, for the most part, fertile and will be valuable as soon as the work is done. It is estimated that the river will have to be dredged from below Maple Rapids to a point near Bridgeville and then cleared of drift for some miles above that point. Probably \$20,000 dollars will be required to do the work properly, but it is believed it will reclaim fully 17,000 acres.

Ex-Gov. Luce was chosen president of the Michigan Pioneer and Historical Society which held its 29th annual meeting at Lansing last week. The recording secretary reported that the total enrollment on the membership book is 891, of whom 401 are dead, leaving a present membership of 490. The treasurer reported a balance of \$315.32 in the treasury, the disbursements of the past year having been \$2,348. The society will not make an effort to publish a volume of collections this year because of the lack of funds resulting from the vetoing of their annual appropriation bill by Gov. Pingree. Before adjourning the society adopted a resolution to the effect that names and records of service of all the soldiers of the American Revolution should be collected, compiled and published by the government in such a manner as shall insure permanence and shall be easy of access.

General.

Ex-President Cleveland has declined to act as counsel for Venezuela before the arbitration tribunal.

The Bryan fertilizer mill on the river front at Alexandria, Va., was destroyed by fire last week. The loss is nearly half a million.

The entire plant of the Standard Oil works at Cleveland shut down last Monday for an indefinite time. Nearly 1,000 men were thrown out of work.

Fire destroyed the Bell grain elevator, the largest in Nebraska outside of Omaha, and the city electric plant last Sunday. The loss is \$37,000; insured for \$7,000.

A match carelessly dropped by one of the workmen in a Chicago fireworks factory, last Tuesday, resulted in the injury of 26 persons. The damage to the building and contents exceed \$60,000.

The four-story Barber memorial school for negro girls, established at Anniston, Ala., last fall on a grant from wealthy Bostonians, burned recently. The loss was over \$50,000. Insurance, \$25,000.

The Columbus, Sandusky & Hocking railroad has been placed in the hands of a receiver. This road defaulted June 1 on \$50,000 interest due. The road suffered on account of dullness in coal trade.

The Illinois legislature, which attracted so much attention while in session, adjourned last week, but it is believed that Gov. Tanner will call an extra session to consider the revenue laws and to reappoint the State, congressionally and senatorially.

Francis Schlatter, who created so much excitement in the far West a few years ago by affecting miraculous cures by reason of his so-called divine powers, is reported to have been found dead in the foothills of Sierra Madre in Mexico. It is believed that he starved to death.

The Allen street railway bill, authorizing five-cent fares and a fifty-year extension of all street railway franchises in Illinois, was passed by both houses of the legislature and on Wednesday received Gov. Tanner's signature. This is the bill that was substituted for the notorious Humphrey bills which created so much excitement in that State a few weeks ago.

The attorneys for Theodore Durrant, the California murderer, have secured permission to appeal to the United States supreme court from the order of Judge Gilbert denying the application for a writ of habeas corpus. This ensures to Durrant another respite of at least four months, and it is possible that his attorneys will be able to delay his execution until near the close of the year.

A colored man named Mitchell was lynched at Urbana, O., last week for assaulting a woman with intent to kill. The local militia was called out to guard the jail and when attacked by a mob of 2,000, fired into the crowd, killing four men and wounding ten. The enraged citizens made another attack and the soldiers refused to obey orders, surrendering the jail and the prisoner into the hands of the mob. Gov. Bushnell is making a rigid investigation.

The Wilcox & White Organ Co., of Meriden, Ct., one of the largest of manufacturers of organs in the United States, has made an assignment. Some months ago it was known the concern was in financial difficulties, but at that time the stockholders and a number of Meriden business men got together, and it was understood that matters had been satisfactorily adjusted. The company was organized in 1876, and established many branch houses throughout the country.

Dr. Franz Boas, curator of the anthropological section of the American Museum of Natural History, and Dr. Livingston Farrand, of Columbia university, have left New York City for the northwest, where they will make a study of the ethnology of the Indians of the North Pacific slope, in British Columbia. These scientists intend to complete a systematic study of North American Indians and other peoples of northwestern Asia with a view to tracing the historical connection that has long been one of the theories of the origin of the American Indians. Expeditions will go out every summer, under the auspices of the Museum of Natural History for six years. Next year's work will be among the Coreans and the peoples of northwestern Asia.

Foreign.

The Spanish cabinet has resigned, and the ruler of that country is placed in an embarrassing position. On the outcome of the crisis will depend the future policy of that country toward Cuba. The liberal element is clamoring for the recall of Gen. Weyler and a change in the Cuban policy.

W. J. Calhoun, who was sent to Cuba to examine into the cause of the death of the American, Dr. Ruiz, returned last week. The final report of the investigation will be sent to Washington by Gen. Lee. It is believed that little new evidence was obtained and that the exact cause of his death will never be known.

The bubonic plague which caused such havoc in Constantinople and vicinity last year, is reported to have appeared in Havana and threatens to add to the suffering which the inhabitants of Cuba have already undergone. It is claimed that fully 20,000 of the Spanish soldiers are now sick. The cases of smallpox are reported to have greatly decreased in number.

Island Lake and Grand Ledge Excursions Sunday, June 20.

D. G. R. & W. R. R. Special train will leave Detroit Union Depot at 8:00 a. m. for these popular resorts. Round trip rate to Island Lake, 50 cents; Grand Ledge, \$1. Return train will leave latter station at 6:30 p. m. Bicycles and baby cabs free. BLAINE GAVETT, D. P. A.

When writing to advertisers please mention that you saw their advertisement in the MICHIGAN FARMER.

WANTED. Good, dry, clean Husks, for mattress purposes. Will pay good price delivered at our factory, corner Hastings St. and Milwaukee Ave., Detroit, Mich. JENES & MUE MFG. CO.



TANKS of any shape or size of white pine or red spruce, **FREE FROM SAP** at low down prices. Send for catalogue and learn about the relative value of tank material, galvanized tanks, siles pumping gas engines, etc. H. B. SEVERANCE, Lansing, Mich.

ARE YOU A PEACH GROWER?

If so, write us and we will give you some important information. **LAWRENCE & CO.,** Faneuil Hall Market, Boston Mass.



Send 20 cents for **KING GRIP Lamp Burner.** No more chimneys falling off. Agents make good money handling them. **SPRANKLE HARDWARE CO.,** Kendallville, Ind.

SLINGS!

OURS HAVE NO SUPERIOR. Guaranteed to Please. Prices to suit the times. Catalogue Free. **COCHRANE FENCE MACHINE CO.,** 17 Woodward Ave., Detroit.

When writing advertisers mention Mich. Farmer.

The Household.

CONDUCTED BY MRS. ELLA E. ROCKWOOD,
FLINT, MICH.

We should be pleased to have any of our readers who take an interest in household topics, send in their views and opinions upon any subject which is under discussion, or which they wish discussed. The invitation is general, and we hope to see it accepted by many. Address all letters for *THE HOUSEHOLD* to Mrs. Ella E. Rockwood, Flint, Mich.

THE PURPOSE OF LIFE.

Do the tears that arise in the heart of the strife
Seem to hide from your vision the purpose of life?
Do the myriad cares of laborious days
Leave the doubt in your heart whether living them pays?

Banish doubt and plod on. Life was given to man
As a part of creation's mysterious plan.
Each must carry what burdens the years may
bestow
Until burdens and bearer alike are laid low.

And the end of the road is a couch with a pall,
And it may be the couch is the end of it all.
Or it may be the spirit, released from the clod,
Shares the freedom of time with the infinite God.

'Tis but folly to dig into moss-covered creeds,
Let your life be a record of generous deeds.
Not the wisest may fathom futurity's plan.
But the weakest may live as becometh a man.

—Chicago Times-Herald.

HOME CHATS WITH FARMERS' WIVES.

STAYING ALL NIGHT.

It is a practice all too frequently followed in the country, of permitting children to pass the night with some schoolmate or friend. I think this is not so commonly in favor at the present time as it used to be, yet even now little girls and boys are often allowed to go home from school to stay all night with seat mates or particular friends.

Parents who favor this plan must not close their eyes to the fact that it is fraught with grave danger to the children, danger which menaces them with an evil than which there is none greater, one which, once a hold is obtained upon its victim, never releases its deadly grasp until ruin results.

Are these strong words? I admit that they are, yet to my mind the enormity of the evil to which I refer permits of nothing else. The most forcible language is not one whitt too strong to be used in denouncing this evil, which is by far more prevalent in every neighborhood than any of us have any knowledge of. Pernicious habits, secretly indulged, are sapping the lives of the young, perhaps in our very midst, among those we deem pure, and whose outward appearance gives no indication of it.

How can you tell, dear mother, as you kiss your sweet little daughter good-bye some morning when she starts off for school, whether she will return to you tomorrow night as pure and as innocent as she is to-day? She is going to stay all night with Mary, or Jennie, or some other girl, perhaps a little older, or more worldly-wise than herself. You may think you are quite sure no harm can result, and you may be right. On the other hand you might be inexplicably shocked and horrified did you know all that was said and done during that visit. Your little girl may come back to you as pure as she goes away, and she may, during her absence, have her young mind poisoned, the deadly virus implanted therein which blights as a simoon of the desert wherever it goes. Staying all night with a playmate has wrought ruin to many an innocent one. The mother of the other child may be as ignorant as yourself of anything wrong, yet it is a fact that even among children of refined parents, in the very homes where one would least suspect it, there is language and behavior, on the sly, of course, which is horrifying.

Where do children learn such things? Of older playmates. A woman with whom I was speaking of this not long ago told me that she would give anything in the world never to have heard the things which were poured into her ears when a child by an older girl. And, by the way, this mother does not permit her daughter to spend the night with school friends.

"But, mother, why won't you let me go and stay all night with the girls?" was the query which a twelve-year-old girl put to her mother a short time ago.

And this mother told her daughter just why. Frankly, plainly, yet delicately—for even the truth needs to be very carefully put to such girls or they will avoid future confidences—she told her why she did not approve of the practice. She told her exactly what you ought to tell your daughter,

yes, and what you ought to tell your son, too. Do not foolishly deceive yourself by saying you want to keep them innocent as long as you can. You cannot keep them in ignorance of certain matters concerning themselves if you permit them to mingle with other children, and you may far better be their informant yourself. You might be astonished to know what your child knows already of the things, knowledge of which is supposed to belong to maturer years.

Children become way-wise at an early age now-a-days. What used to be considered as belonging to twenty-one is now the property of the ten-year-old. If we would forestall evil we must not flatter ourselves that it does not abound.

As a disseminator of some forms of evil the public school is unparalleled. How frequently we hear mothers say, "How rough Charlie is since he commenced going to school." Charlie goes to school and falls right speedily into the hands of those who know things which he does not, things outside the spelling book, too. He is cautioned not to "tell," and alas, he doesn't, so the parents receive not the slightest intimation of what he is learning that is not down on the books.

Truly the mothers of this land have need to be watchful over their children. In such an hour as we think not, the enemy cometh and soweth tares with the good seed which we are trying to implant within their hearts.

Some older boy or girl may fill your child's mind with pernicious matter and the little one come to you with it. In this case never repulse the child, but listen to all he has to say, then tell him in the best way you can all that you think he ought to know. Some mothers make the mistake of forbidding the recital of such stories that have been heard at school and, once repulsed, a child will never come to you again. He will hear the stories all the same, but is in far greater danger from the effects than if mother could be made a confidant and a counselor.

Keep the children at home nights. It is the best place for them. And as far as possible let each have his or her own bed. Sacrifice the "spare" bedroom if need be rather than allow the boys to sleep with the hired men or the little girls with the maid. Far better is it for each to sleep alone.

FOR HOME DECORATION.

Butcher's linen makes a pretty and inexpensive cover for a commode, washstand, or sideboard. It is also very durable, and washes beautifully. Make it the width of the commode or piece of furniture you wish to cover, and long enough to extend six or eight inches over each end. Finish the sides with narrow hemstitched hems, and the ends with hems two inches wide. If fringe is preferred for the ends, draw out threads to the depth required, and make it heavier by knotting small bunches of thread at short intervals along the edges. Embroider a bunch of lilacs or any other flowers you choose in two opposite corners, using Asiatic silk in the natural shades for the flowers, and green Boston art silk in the natural shades for the stems, and green Boston art silk for the leaves.

Almost all the couch pillows and other cushions are covered with wash goods now, which is a very sensible and economical fashion. Figured sateen makes a nice cover, so also do the new figured art denims that can be had in a variety of colors, and need no finish except a frill of the material around the edge. This frill should be about four inches wide, and twice as long as the distance around the pillow, gathering it very full at the corners. The cover should be made just large enough to slip over the pillow easily, and fastened at one end with buttons and button-holes, so that it can easily be removed and washed whenever it becomes soiled. Plain blue and brown denim is pretty with a border or center embroidered in colors. A blue cushion, made with the light side out, has a bunch of nasturtiums worked in the center, using shades of red and yellow Roman floss for the flowers and green for the stems. A conventionalized design is worked in each corner of a brown one, using dark brown silk, and the effect is beautiful.

Beautiful centerpieces and dollies for the dining-room table are made of linen of almost any quality, using the finer pieces for best, and butcher's linen or damask for everyday use. They are simply or elaborately decorated, as the taste and time of the maker dictate. If you wish to sketch the design, many natural flowers will be pretty copied, or if you lack the time to draw the designs, the perforated stamping patterns are very satisfactory. The edges are finished with button-holed scallops or hemstitched hems. The delicate shades of blue, pink, yellow, green, and lavender show the work to better advantage than white, and if the Asiatic embroidery silks are used, they can be washed any number of times without fading. It takes so little time to work such things, it would seem that any housekeeper could afford to have them.

KANSAS HOUSEKEEPER.

THE ROSE RUG.

Among rugs there are few so handsome, of home manufacture, as the rose rug. As seen in cut (Fig. 3) the center is a circle; this can be made of any size to suit the taste of the maker—four inches in diameter is about right—and the length of leaves or petals should be five inches from tip of leaf to base. Made of heavy cloth, as cloakings, heavy suitings, etc., they are very substantial and durable. The best parts of coats, vests, trousers, etc., can be utilized, and odds and ends worked up in this rug that could not be used in any other way. My rose rug is made of the best parts of a

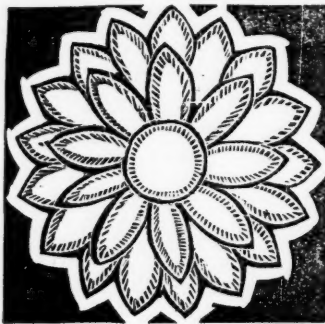


FIG. 3.—ROSE RUG.

cloak, past wearing. The edge of leaves and center were whipped at regular distances with crimson yarn. The ornamentation is a matter of taste and I may add, time. The edges can be buttonholed or cat-stitched or treated in any way fancy dictates. If enough material cannot be found of one color alone, then alternate the colors;

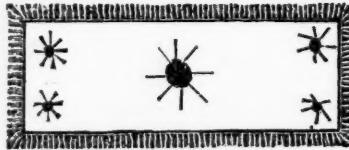


FIG. 4.—ROSE RUG.

for instance, should one-half of the material at hand be gray in color and the other half black, or blue or brown, place each color alternately, and the effect will be good.

Cut a pattern leaf and circle from stiff pasteboard; cut out evenly; pieces that have been seamed can be used by sponging and afterward pressing well. As the leaves are prepared separately they can be ornamented at odd moments until all are ready, when they are sewn firmly on a heavy foundation. The circle of leaves can be extended to suit the place it is intended to protect or adorn. As outlined in Fig. 4, the pattern can also be used to ornament an oblong or a square-shaped rug. The dots show position of rose; four smaller ones are placed near the corners. The spaces can be filled in by using strips of some contrasting color, or the foundation may be plain; finish with a fringe. Hemp carpeting cut into strips and fringed makes a nice finish for rugs.

DORIS.

A FEW OLD FAVORITES.

The warm days of summer should furnish leisure for a little reading, although many times the worn-out housewife is too tired to attempt anything heavy. I have a few books that I often turn to when tired or not in the mood for anything new. These are like my real friends, they harmonize with all moods. The latest addition to the selection is Lillian Whiting's "The World Beautiful." Then there are three volumes of Emerson, marked and beloved, yet not just the reading for a tired mind, as they are apt to prove a mental stimulus. "Mill on the Floss" is another favorite. Few heroines in all the world of fiction have grown so dear to me as loving, trusting Maggie Tulliver. As for Mrs. Glegg and Mrs. Pullet—well, I'm glad I know them on paper instead of in real life. "Les Misérables," too, must not be forgotten, even if a little Emerson in inducing mental activity instead of quiet.

Then there is a charm about Tennyson that rests me. Even if Bayard Taylor does describe his verses as "gorgeous, velvety, crimsoned, golden-anthered tiger-lilies," I find something in their beauty of coloring and imagery that makes me forget the trials of this mundane sphere. "The Lotus Eaters," "The Holy Grail"—oh, their names are legion. "Evangeline," while as different from the poems just mentioned as its author was from Tennyson, will soothe and tranquilize a tired mind.

I admire and reverence Lincoln, Garfield, and the hundreds of other great and good men who grew up contending with a lack of educational advantages, but I don't care to win fame and fortune in the same way. I am so glad that I live in an age and a land of books.

HOPE DARING.

A FAMILY OF BIRD LOVERS.

I was much interested in "Our feathered friends" of May 22. We, as a family, are much interested in birds. Husband took a ride of seven miles about the middle of May, and on the way back saw, by close watching, twenty-six varieties, viz.: Crow, yellowbird, bee or kingbird, strike or butcher bird, robin, small woodpecker, chipping sparrow, catbird, bobolink, red-winged blackbird, thrush, phebe, hawk, kilder, ground sparrow, English sparrow, meadow lark, bluebird, Baltimore oriole, red-headed woodpecker, barn swallow, indigo bird, cuckoo, blue jay, crow blackbird, and one that he did not know. Who can beat it?

Our place is surrounded by evergreens, elms, maples, silver birch and some nut trees, besides the orchards; so we have plenty of music. I am no great friend of the blue jay, but I did feel sorry for one a few winters ago. We heard a great racket in an evergreen close to the house about nine o'clock in the evening. My daughter ran out, and as it was moonlight she saw something dark on the snow, and picked it up. It proved to be a blue jay, and his eyes had just been torn out by a screech owl. We were glad to find him dead. The owl sat in the tree in the morning in all his glory.

I hope everyone who is interested in birds has A. J. Cook's "Birds of Michigan." I am glad there is a strong and fashionable sentiment fast growing in the cities, and country too, against using dead birds for ornaments. I hope every member of the Household will consider herself a member of the Audubon Society to that extent.

SHARON.

WHITE SKIRTS.

DEAR SISTERS OF THE HOUSEHOLD:—Housecleaning is over with us for this time. By commencing early I received more help from the men than if I had waited for warm weather, neither did I feel the need of hurrying through with it, as it was early enough to take plenty of time for each room and a good rest in between.

The lace curtains in my sitting room had been done so many times they had shrunk both in length and width and having only one for each window they looked scrumpy, a thing I abhor. New ones were out of the question entirely so I pinned the drapery pins in the middle of each curtain, hooked them into the rings then threw one end of the curtain over the pole, having the fullness come in the center, then drew the outside corner of the curtain behind and over the pole, letting it hang over about six inches. These made very pretty lambrequins of them and do not look scrumpy a bit. They will also keep clean much longer.

Our hired man cleaned the cellar for me, for which I was truly thankful; but then I do all his washing, ironing, and mending, including fine shirts.

The warm weather is at hand bringing numerous white skirts to iron, and as I have two little girls to iron for I sometimes do my white skirts this way. Have the starch quite thick and hot; dip the skirt to within about eight inches of the top, being sure to get the starch evenly through the skirt, lift out of the pail with one hand and gently strip the starch off with the other until it does not drip. Do not wring, but button the belt, and hang on the line so that the folds will come in the sides of the skirt, shake out the bottom, let dry thoroughly, then take from the line and stretch gently with the hands. Do not iron unless there should be some trimming around the bottom which may be ironed, then hang away. Do not worry because you haven't ironed it or imagine when you have it on that every woman you meet knows about it. It will set your dress out better and rustle more than if ironed.

Perhaps someone will say, better iron your white skirts instead of the hired man's fine shirts, but he is only a boy of fifteen, his mother is far away, so is the laundry, and he has no one else. Then there is the motto, "Do unto others as ye would that others should do unto you," to console me.

MRS. GRACE.

BAKED potatoes have their starch grains more thoroughly cooked than when either boiled or steamed, and, for this reason, may often be safely eaten by delicate invalids who cannot touch them boiled.

Enameline

The Modern STOVE POLISH.

Produces a JET BLACK enamel gloss. Dustless, Odorless, Labor Saving. 5 and 10 cent boxes. Try it on your Cycle Chain.

J. L. PRESCOTT & CO., NEW YORK.

MRS. RED SQUIRREL.

Mrs. Red Squirrel sat in the top of a tree: "I believe in the habit of saving," said she; "If it were not for that, in the cold winter weather I should starve, and my young ones, I know, altogether."

But I'm teaching my children to run and lay up Every acorn as soon as it drops from its cup. And to get out the corn from the shocks in the field— There's a nice hollow tree where I keep it concealed. We have laid up some wheat, and some barley and rye.

And some very nice pumpkin seeds I have put by; Best of all, we have gathered in all that we could Of beechnuts and butternuts grown in the wood; For cold days and hard times winter surely will bring.

And a habit of saving's an excellent thing.

"But my children—(you know how young squirrels like play).

"We have plenty, great plenty, already," they'll say. "We are tired of bringing in food for our store; Let us have a frolic and gather no more!"

But I tell them it's pleasant when winter is rough, If we feel both to use and to give we've enough; And they'll find ere the butternuts bloom in the spring That the habit of saving's an excellent thing."

SHORT STOPS.

MRS. F. M. D., Hillside Farm, writes:— Another stranger wishes to enter the circle and contribute a few useful hints to the now busy housewife. We realize our summer work has fully begun on the farm, and with it comes the putting up of fruit and vegetables for the coming winter.

I want to tell you a nice way to put up cucumber pickles that are always ready for the table. To six quarts strong vinegar add four quarts rainwater, one quart salt and one-quarter pound alum. Pour scalding water over all cucumbers and dry before putting in. Put horse-radish leaves or grape on top with light weight. This will make nearly six gallons. If not sour enough put them into a little fresh vinegar before using.

When you tire of plain pieplant pie make a change by slicing in half a lemon which you will find improves it much.

Our men folks are very fond of a fresh molasses cake, so will send you a good receipt for one. [In another column.—Ed.]

If you are unfortunate enough to have hired help bring in bedbugs, you can easily get rid of them by using melted lard in all the cracks and crevices of the bedstead.

CARRIE E. S., writes:—I often think I will write something for the Household in return for all the benefits I receive from others, but never before have had anything particular to write. Now I want to tell the sisters about my washing fluid which helps me so much. It is cheap and will not rot the clothes as some washing fluids do. I have used it for many years and so has my sister. We got the receipt out of a paper years ago.

One pound box of potash, one-half ounce salts of tartar, one-half ounce of sulphate of ammonia. Put into a jug or jar and pour over them a gallon of water. When I put my clothes into the boiler I add half a pint of the fluid and boil 15 or 20 minutes. They will need very little rubbing. Do not make white clothes too blue; just enough bluing to color the water is my rule, and they look better than when more is used.

WARM WEATHER IN WASHINGTON.

DEAR SISTERS OF THE HOUSEHOLD:—I suppose back in Michigan there is not much done towards crops yet, but out here the grain is all in and most all of it is up four inches or more, and all sown this spring.

The weather here is real warm, actually hot at noon; orchard has bloomed and the blossoms fallen, and lettuce and radishes most large enough to use, and grass as green as can be. How does that compare with your State?

I don't put in much garden myself, just a few rows to have something green for the table while the good man gets in his grain, then he plants all the garden. He doesn't consider me a match for him in that line so he doesn't trust me with it, and I am perfectly willing to leave it to him.

One thing an eastern person can appreciate about the climate of Washington is, the cool nights, so fine for sleeping. No tumbling about and actually suffering with the heat here; we sleep comfortably with a blanket on the bed.

That letter to girls (May 8) was just splendid. I would have been very glad of such advice when I was young. I have half a mind to lay it up for my girl to read ten years from now. She is but six years old at present. That is just what I would say to her. I hope the merry, fun-loving girls will read and profit by it.

WHITMAN CO., Washington. SISTER MARY.

ANOTHER WAY OF MAKING BREAD.

I have seen several recipes in the Household for making bread, but as none of them seem to be quite as simple as mine (they all seem to require sponging) I will send my way. Commencing with the yeast, this is the way it is made:

Take one quart of flour, three large spoonfuls of sugar and two of salt. Scald all together with boiling water and when cool add two well-soaked yeast cakes. Let rise three hours. Now cook twelve large potatoes; mash and add cold water till cool; stir into the yeast, and set aside to

rise. This will make three gallons of good yeast if your yeast cakes and potatoes are good. Maybe when you read this you will think it a great bother to make the yeast, but it will keep two weeks in a cool place and requires but a few hours to prepare it.

In the morning take two quarts of the yeast for six medium-sized loaves of bread, add salt and sugar to taste and enough flour to make a hard loaf. If possible, knead 15 or 20 minutes. Rub top of loaf with lard to prevent a crust forming, and let rise. When light, mold into loaves, grease the top and let rise again; then bake. As soon as it comes from the oven, rub tops with butter which gives a soft crust. If you have good flour your bread will be out of the way by eleven o'clock.

We use spring wheat flour. In the summer I sometimes mix my bread just before going to bed and put into a cool place, and put it into loaves the first thing in the morning, and have it all baked before it gets so hot. Those who have to use wood stoves through the summer will find this a great help.

L. N. F.

CONTRIBUTED RECIPES.

GOOSEBERRY PUDDING:—Make a dough same as for biscuit, roll about one-half inch thick, cover with gooseberries, sprinkle with sugar, begin at one side and roll together, snug as possible. Lay on a tin and steam two hours. Serve with sweetened cream.

BAKED EGGS:—Break as many eggs as desired into a buttered tin, taking care that each is whole and does not encroach upon the others. Sprinkle with salt and pepper, put a bit of butter upon each, put in a moderate oven and bake till the whites are set. This is very nice for breakfast served on toast.

CREAM COOKIES:—Two cups of sugar, one cup of lard, two eggs, one cup of sour cream, one teaspoonful of soda, one teaspoonful of baking powder, flour enough for soft dough.

BITTER SWEET.

MOLASSES CAKE:—One cup molasses, one-half cup sugar, one-half cup shortening, two teaspoonfuls soda dissolved in one cup boiling water, two and one-half cups sifted flour, two eggs well beaten, stirred in last, ginger and seasoning to taste.

MRS. F. M. D.

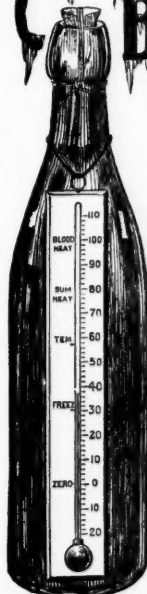
DELICIOUS FRENCH PRESERVES:—Scald five quarts currants and squeeze out the juice as for jelly. Add to juice five pounds sugar, one quart cherries, canned or fresh, two pounds seeded raisins, six oranges peeled and cut in very small pieces with rind of two of them. Boil all together until it jellies. Put in tumblers. F. E. S.

[The household editor was permitted to sample this preserve last year and can give it her unqualified approval.]

MONEY MADE IN A MINUTE.

I have not made less than \$16.00 any day while selling Centrifugal Ice Cream Freezers. Anyone should make from \$5 to \$8 a day selling cream and from \$7 to \$10 selling freezers, as it is such a wonder, there is always a crowd wanting cream. You can freeze cream elegantly in one minute and that astonishes people so they all want to taste it, and then many of them buy freezers as the cream is smooth and perfectly frozen. Every freezer is guaranteed to freeze cream perfectly in a minute. Anyone can sell ice cream and the freezer sells itself. My sister makes from \$10 to \$15 a day. W. H. Baird & Co., Dept. 110, Sta. A, Pittsburg, Pa., will mail you full particulars free, so you can go to work and make lots of money any where, as with one freezer you can make a hundred gallons of cream a day, or if you wish, they will hire you on liberal terms.

A COOL BOTTLE



of Hires Rootbeer on a sweltering hot day is highly essential to comfort and health. It cools the blood, reduces your temperature, tones the stomach.

HIRES Rootbeer

should be in every home, in every office, in every workshop. A temperance drink, more healthful than ice water, more delightful and satisfying than any other beverage produced.

Made only by the Charles E. Hires Co., Philadelphia. A package makes 5 gallons. Sold everywhere.

"THE KING" BICYCLE.



Well made, strong and easy running. Has all the latest devices. A wheel run to date in every particular. Write to W. A. KING & CO., 15 Cadillac Square, DETROIT, MICH., and learn how to get ONE FOR NOTHING.

Only \$18.

FREIGHT PAID.



7-DRAWER MICHIGAN FARMER SEWING MACHINE

Standard Make. High Arm. High Grade.

The only strictly high grade, 7-drawer machine ever offered to their subscribers by any publishers. It is the regular selling machine of one of the largest manufacturers of only high grade machines, and sells regularly at \$45 to \$65. It is the same machine with 7 drawers as the 5-drawer machine which we have been handling the past year and which has been giving such unparalleled satisfaction. Only one complaint out of a thousand machines sold, and that one not the fault of the machine. Each machine is Fully Tested. Fully Warranted.



DROP HEAD WHEN NOT IN USE

DROP HEAD Ready for Use.

A DROP HEAD MICHIGAN FARMER MACHINE.

Useful and Ornamental.

Takes the Place of a Stand when Not in Use.

The machine head is exactly the same on both machines; the difference is entirely in the wood-work. Easily dropped and put in place.

Price, \$20, freight paid.



No Commission Paid Agents.

The Subscriber gets the Full Benefit.

WARRANTED 10 YEARS!

Has all the

Latest Attachments.

Self-setting Needle; Automatic Bobbin Winder. Oak or Walnut wood-work. New bent-wood top. Seven long skeleton drawers. An illustrated instruction book sent with each machine.

Repairs or Needles Furnished at Any Time.

Every machine is fully guaranteed to give perfect satisfaction or money refunded. Machines cannot be sent C. O. D. or on trial. Money must accompany each order. Our guarantee protects the purchaser, and if, after a reasonable trial in their homes, it is not satisfactory he gets his money back and all charges will be paid by us. Our profits are too small to handle them in any way except for cash. We have to pay spot cash for them. Remit by P. O. order, registered letter, N. Y. draft, or by express. Make all orders payable to

THE LAWRENCE PUBLISHING CO., Detroit, Mich.

Read these letters received from ladies who are using MICHIGAN FARMER SEWING MACHINES:

Owosso, Mich.

MICHIGAN FARMER. GENTS—The sewing machine I got of you one year ago is in every way satisfactory. I would not take what it cost for it unless I was sure I could get another of you. Truly yours, EDITH LILLY JOHNSON.

FITCHBURG, MICH., May 14th, 1897.

LAWRENCE PUBLISHING CO., Detroit, Mich. In regard to Michigan Farmer Sewing Machine, can truly say I am very much pleased and satisfied with machine. Should have written before but

wished to give it a thorough trial. Have learned how to use all the attachments with nothing more than the aid of the instruction book. It's a perfect machine in all respects, as good as our neighbors have purchased at the price of thirty to forty dollars. I can cheerfully recommend it to all. Some of our neighbors who have taken your paper for years think of sending for a machine this fall since they have seen mine. Wishing you many sales, I am respectfully,

LYDA PARMAN.

N. B.—Was very much pleased with the neatness in which the machine was packed and sent.

Legal Department.

CONDUCTED BY EARL D. BABST
56 Moffat Building, Detroit.

SUBSCRIBER, Lapeer, Mich.:—Send diagram showing position of lots and house.

SUBSCRIBER, Royal Oak, Mich.:—Unless you wish to appeal from the judgment as now had, we would advise you, by all means to pay it, and save further costs and expense. The property in Pennsylvania could only be held for the judgment on the showing that the same was transferred in fraud of creditors, and this would have to be a court proceeding to which you would be a party. Your property in Michigan would be subject to levy on the judgment by transfer of judgment, as the basis of a new suit.

RIGHT TO TAKE FISH FROM STOCK STREAM.—J. D., Freeport, Mich.:—Has the public the right to fish out of a creek that has been stocked and protected by the State for about ten years, or have the parties owning the land through which the creek runs a right to forbid the public from fishing?—The Legislature of 1891 enacted "that in any of the navigable or meandering streams of this State where fish have been or hereafter may be propagated or spread at the expense of the people of this State, or of the United States, the people shall have the right to catch fish with hook and line during such seasons, and in such waters as are not otherwise prohibited by the laws of this State. No action at law shall be maintained against persons entering upon such waters for the purpose of such fishing, by the owner, lessee, or persons having the right of possession of the adjoining lands, except for actual damage done. The ownership of fish is in the people of the whole State, and the individual has no property right in them, unless he has subjected them to his own control."

THE DUTY OF SUPERVISOR IN MAKING ASSESSMENT—MAY REQUIRE SWORN STATEMENT.—E. D., Calhoun county, Mich.:—A supervisor leaves an assessment blank at the home of a taxpayer, saying to the person with whom he leaves it that the taxpayer can sign it and return to the supervisor. The taxpayer is absent from home, and the supervisor puts him on the assessment roll for \$1,000 more money than he has, and writes to the taxpayer saying that he put him down on the assessment roll for \$1,000 extra, and that if he considers it an unjust assessment he can come before the board of review and swear it off. The taxpayer was unable to go before the board of review on account of sickness. Will the assessment stand?—It is the duty of the supervisor to ascertain the taxable property in his assessing district. For this purpose he may require the taxpayer to make a true and correct written statement, under oath, but the law does not require him to use such means to ascertain the taxable property. It is, therefore, optional with the supervisor whether he demands such a written statement or not. Therefore we are of the opinion that the above assessment is good. The taxpayer, while he could not go in person before the board of review, should have sent a representative to correct the matter.

ACT TO PREVENT DECEPTION IN THE MANUFACTURE AND SALE OF IMITATION BUTTER.—No person, by himself, or his agents, or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product or compound made wholly or in part out of any fat, oil or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same. Nothing in this act is to be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter. Whoever violates the above provisions is punishable by a fine of not less than \$50, nor more than \$500, and the costs of prosecution, or imprisonment in the county jail, or State House of Correction and Reformatory at Ionia, for not less than six months nor more than three years, or both such fine and imprisonment, in the discretion of the court, for each and every offense.

SPEARING FISH IN INLAND LAKES PROHIBITED.—A. J., Highland Station, Mich.:—According to the last fish law, can a person spear fish in all the inland lakes? Is the meaning of "inland lakes," lakes without outlet or inlet?—It is unlawful to take, catch or kill, or attempt to take, catch or kill, any fish in any of the inland lakes and streams of this State with any kind of spear or trap hook or by the use of set lines, or night lines, or any kind of net or any kind of firearms or other explosives or other devices except hook and line. This rule governs all waters, except Little and Big Clam lakes in Wexford Co., where mullet, grass pike, suckers and redsides may be speared during any season of the year. However, any fish, except brook trout, rainbow trout, German or brown trout, grayling, land-locked salmon and black bass, may be speared through the ice during the months of December, January, February and March in any of the inland lakes and streams and in Lake St. Clair and the St. Clair river below Algonac, ex-

cept where there is some special local act to the contrary. An inland lake or stream, to be under the protection of the State, must be connected with the waters of the State. If a lake lay on a man's own land and had neither outlet nor inlet, the fish in it would be private property and the owner might do with them as he pleased.

The Markets.

WHEAT.

The week closes with values about 2½ to 3 cents higher on spot than a week ago, while futures are about a cent lower. This statement practically gives the ideas entertained by a majority of dealers, namely, that wheat will be scarce and perhaps a little higher, from now until harvest, and lower afterwards. At present weather conditions and the export demand control the market, and operators aim to handle reports on these points so as to help their deals. Hence there is an enormous amount of able-bodied lying done by both bulls and bears so as to influence values, and rumors and telegrams are looked upon with suspicion, no matter where they come from. The visible supply is at the lowest point reached in many years, and only the general stagnation of business prevents some of the big operators from starting a movement to control the market and manipulate values so as to secure big profits.

The following table exhibits the daily closing sales of spot wheat in this market from May 10 to June 10 inclusive:

	No. 1 White.	No. 2 Red.	No. 3 Red.
May 10.....	89½	89½	85
" 11.....	89½	89½	84
" 12.....	90	90	84½
" 13.....	90	90	84½
" 14.....	89	89	83½
" 15.....	89½	89½	83½
" 16.....	87½	87½	82½
" 17.....	87	87	81½
" 18.....	87	87	81½
" 19.....	88	88	83
" 20.....	87	87	82
" 21.....	87½	87½	83
" 22.....	87	87	83
" 23.....	87½	87	83
" 24.....	88	84½	79½
" 25.....	83	81	76
" 26.....	82	79½	74
" 27.....	80	79½	75
" 28.....	77	75½	71½
" 29.....	77½	76½	72½
" 30.....	77	77	72½
" 1 June.....	78	77	73
" 2.....	78	77	73
" 3.....	78	77	73
" 4.....	78	77	73
" 5.....	78	77	73
" 6.....	78	77	73
" 7.....	78	77	73
" 8.....	78	77	73
" 9.....	78	77	73
" 10.....	78	77	73

The following is a record of the closing prices on the various deals in futures each day during the past week:

	July.	Aug.	Sept.
Friday.....	70	67½	67½
Saturday.....	69½	67½	67½
Monday.....	70	67½	67½
Tuesday.....	71½	69	69
Wednesday.....	70½	68	68
Thursday.....	70½	63½	68½

The visible supply of wheat on Saturday last, as compiled by the N. Y. Produce Exchange, was 24,450,000 bu., a decrease of 2,447,000 bu. over the amount reported the previous week. These figures show the visible supply to be less than one-half what it was one year ago.

The Minneapolis Market Record says: "There is no reason to think that the supply of wheat available will not, if properly distributed, be sufficient to meet wants of millers and consumers until the new crop comes upon the market. It may be tied up in a way that will not permit of an equal supply all around and thereby cause some disturbance."

A great deal of trouble was caused last year by the quantity of rye that was found mixed with the wheat reaching this market. The presence of a little rye in a car of wheat is sufficient to reduce the price materially and Detroit dealers are sending out cards to country buyers asking them to call the attention of farmers to this fact. It is said the rye may easily be pulled up while growing, but it is very difficult to separate the grain after threshing.

It is estimated that 10 per cent of last year's wheat crop in Minnesota, South Dakota and North Dakota is still in farmers' hands.

According to the last bulletin of the Ontario bureau of industries, the outlook for fall wheat is excellent, the total production of the fields sowed with it promising to exceed that of either of the last two harvests. The acreage is greater than in 1896, and the influences so far at work point to a higher mean yield. In the western part of the province, where most of the fall wheat is grown, the crop is flourishing. In the eastern part a very considerable proportion of the crop has had to be plowed up, owing to the destructive action of frost and rain, but this serious loss to the farmers affected will not of itself pull down the average or aggregate yield to last year's figures.

A Chicago dealer says: It is very evident to even a casual observer that the market is not legitimate and is governed by legitimate influences. There is every statistical reason for higher prices, and there is no prospective productive reason at the moment for any great decline. The harvest is still in the future and there are many dangers yet to be overcome while stocks are decreasing in every market. This, however, cuts no figure. The two sides being so evenly balanced, the market is narrow and susceptible to pit manipulation by large traders.

The Dixie Miller, of Nashville, Tenn., says: "We have reports from all parts of the winter wheat belt, and from these reports it would seem that we were to have a very fair wheat crop. Farmers in this section will commence cutting wheat the latter part of next week and indications are that they will sell freely at harvest time."

A cablegram from the London Corn Trade News on Wednesday furnished the following: Quantity of flour and wheat afloat for Europe on June 1 was 20,800,000 bu., against 17,100,000 bu. on May 1, and 31,800,000 bu. on June 1, 1896. Total quantity in store in the principal countries of Europe on June 1 was 35,200,000 bu., against 38,800,000 bu. on May 1 and 30,200,000 bu. on June 1, 1896. Total quantity afloat and in store on June 1 was 55,500,000 bu., against 56,900,000 bu. on May 1 and 62,000,000 bu. on June 1, 1896. Stocks in Russia were reduced 2,000,000 bu. during May. Roumanian, Bulgarian and Bessarabia crops seriously compromised. French situation slightly improved. Argentine weather unfavorable. India resumed shipments on a small scale.

THE outlook for fruit in Ontario, especially apples and plums, is said to be unusually good.

DAIRY PRODUCTS.

BUTTER.

There was a little more activity shown in our local market early in the week, the result of an increased demand from the advent of a number of thousands of visitors. But the market has dropped back again to the easy condition it held a week ago, with values holding about the same range. Quotations are as follows: Creamery 14½¢; finest dairy, 11½¢; fair to good 8½¢; low grade, 6½¢. Some creameries, as well as private parties, are getting a good deal over these figures for their product, but it is on contract account. Were they compelled to sell on the open market it would be very difficult to get even a fraction advance over the prices quoted above. At Chicago the market is in about the same condition as noted a week ago. There is a fair demand, with ample stocks to meet all requirements. Values hold steady, but there is no disposition to wait for higher figures. Quotations in that market on Thursday were as follows: Creameries—Extras, 14½¢; firsts, 13½¢; seconds, 11½¢. Dairies—Fancy, 12¢; firsts, 10½¢; seconds, 7½¢; imitation creameries firsts, 10½¢; packing stock, fresh, 6½¢; roll butter, choice, 5½¢. The New York market has declined a fraction, and there is an easier feeling in the trade than a week ago. The outlook does not promise any immediate improvement in prices. The Tribune says of the market: "Arrivals have increased very materially, and are now running heavier than was ever known at this season of the year. This would naturally cause an easy feeling to the market, but so much stock is going into store on owners' account that actual offerings are not very burdensome as yet, and prices are fairly maintained. The speculative movement among local operators has not assumed large proportions as yet; neither is there very much demand from shippers. Sellers seem to feel, however, that in view of all the advices from other points prices here ought not to be disturbed much, and there is a steady holding of strictly fancy fresh creamery at 15¢. Buyers are critical, however, and demand absolutely full grass and perfect quality when paying the top rate. Only slight defects in quality reduce the selling value from ¼¢, and there are a good many average firsts seeking custom at 14¢. Shippers have taken, perhaps, 1,500 pkgs. of fresh creamery during the week at 14½¢, but a large part of this business was somewhat experimental and does not indicate many direct orders. The quantity of State dairy butter coming forward is very light, as most of the farmers in the best sections are packing into firkins." Quotations in that market on Thursday on new butter were as follows:

EASTERN STOCK.	
Eastern creamery, fancy.....	14½¢
Eastern creamery, good to choice.....	12 ¢
State dairy, h. f. tubs, fancy, fresh.....	14 ¢
State dairy, h. f. tubs, good to choice.....	11 ¢
Welch tubs, extras.....	13½¢

WESTERN STOCK.	
Creamery, Western, fancy.....	14½¢
Creamery, Western, choice.....	14 ¢
Creamery, Western, fair to good.....	11 ¢
Dairy, Western, firsts.....	11 ¢
" thirds to seconds.....	7½¢
Western imitation creamery, choice.....	12 ¢
Western imitation creamery, fair to good.....	8½¢
Factory, fresh, choice.....	10 ¢
Factory, fresh, fair to good.....	7½¢

At the Utica on Monday last 40 packages of creamery were sold at a range of 15¢ per lb. The previous week the range was also 15¢. At Little Falls, on Monday last dairy butter sold at a range of 14½¢, as compared with 14½¢ the previous week.

CHEESE.

There has been a further decline in cheese in this market the past week. Quotations are 8½¢ for the best full cream, with rather a light demand. As both the Chicago and New York markets are at a lower range than our own, there is more reason for a decline rather than an advance in values. At Chicago the market has declined, and is not at all active at the decline. If receipts continue to increase and quality shows no improvement there may be another drop. Quotations in that market on Thursday were as follows: Full cream—Young Americas, 7½¢; twins, 7½¢; brick, full cream, 8½¢; Swiss, fair to choice, 8½¢; Limburger, good to choice, 5½¢; cheddars, 7½¢. The New York market has held steady, and even made a fractional advance during the week, under an active demand from exporters. Receipts also were rather light up to the close of the week, but since then have steadily increased. The N. Y. Tribune says of the market: "At the close the demand is by no means snappy, exporters were evidently not obtaining as favorable responses to their cables as expected, and the few buyers around were generally looking for fancy white cheese and more particular regarding quality and color. The high prices at Utica and Little Falls on Monday tended to hold receivers pretty steady in their views, and 8½¢ was still the general asking price. Small size full cream continue quite plenty, but the low prices ruling at the close of last week attracted considerably increased demand, and the market cleaned up more closely than for several weeks past, though holders generally met buyers promptly on the basis of 7½¢ for fancy white, and 7¼¢ for fancy colored. This week the receipts continue large, but quality generally showing grass, and holders not so anxious to urge sales and generally asking 8¢ for both white and colored; that figure is obtainable for strictly fancy white, which is not very plenty, but colored cheese is selling slowly, as most dealers have more or less stock on hand obtained at cheaper prices last week, and inclined to hold off until compelled to buy." Quotations on new cheese in that market on Thursday were as follows:

Full cream, large, colored, fancy.....	8½¢
" " " white.....	8½¢
" " " choice.....	8 ¢
" " " fair to good.....	7½¢
" " " small, fancy, colored.....	7 ¢
" " " " white.....	7 ¢
" " " fair to good.....	7 ¢
Part skims, good to prime.....	5½¢
" " " choice.....	6 ¢
Common to fair.....	3½¢
Full skims.....	2 ¢

On Monday at the Utica Board, 6,837 boxes were sold at a range of 7¼¢. On the same day last week 7,379 boxes were sold at a range of 6½¢.

At Little Falls on Monday 5,601 boxes were sold at a range of 7¼¢. The demand was active, and competition lively. A year ago the same day 4,709 boxes were sold at a range of 5½¢.

In the Liverpool market on Thursday the choicest American cheese, both white and colored was quoted at 4½¢, a decline of 1s. from the quotations of the previous week.

WOOL.

The movement of wool in the interior is much slower than usual at this season. There does not seem to be any change in values, nor any disposition on the part of buyers to advance rates to secure supplies. It is evident there will be no change in the range of prices before the new tariff bill goes into effect and the effects of the new duties upon values can be estimated. We give some extracts from our country exchanges to show how the staple is selling at the points indicated:

Fowlerville Review: Two buyers are in the wool market at this place this year, F. G. Rounsaville and Euel Curtis. The prices paid thus far range from 9 to 16 cents.

Vermontville Echo: Parker & Benedict have bought over 7,000 pounds of wool and the prices they pay bring the farmers here from a long distance.

Oakland Co. Post: Brooks and Voorheis are still taking in wool Wednesdays and Saturdays. The price for unwashed wool is from 10 to 15 cents per pound and 14 to 18 for washed wool. They expect to take in between 60,000 and 70,000 pounds this year. Their biggest day so far was 9,000 pounds. Compared with other years, this crop is small or else there are more buyers in the market. This firm have taken in from 100,000 to 150,000 pounds in one season and have bought as much as 12,000 pounds in one day.

Grand Ledge Independent: The eastern wool market is growing weaker, but prices paid here are still—unwashed, 10 to 15¢; washed, 14 to 20¢.

Clinton Independent: Syrel Parmenter is engaged in buying wool at this place (Shepardville), but as yet the receipts have been light. Prices range from 10 to 15¢ for unwashed, and from 15 to 19¢ for washed. Twenty cent has been paid in a few instances for first-class wool. This is an advance of two to three cents per pound over last year's prices.

The following are the Boston quotations for leading descriptions:

Ohio and Pennsylvania fleeces—X and above, 19¢; No. 1 combing, 23¢; No. 2 combing, 23¢; XX and above, 21¢.

Michigan, Wisconsin, etc.—X Michigan, 17¢; No. 1 Michigan combing, 21¢; No. 1 Illinois combing, 22¢; No. 2 Michigan combing, 22¢; No. 2 Illinois combing, 22¢; X New York, New Hampshire and Vermont, 17¢; X New York, New Hampshire and Vermont, 18¢; delaine, Michigan, 20¢; lake, and Georgia, 18¢.

Unwashed, medium—Kentucky and Indiana, ¼ blood combing, 18¢; Kentucky and Indiana, ¼ blood combing, 18¢; Missouri, ¼ blood combing, 17¢; Missouri, ¼ blood combing, 17¢; braid combing, 17¢.

Texas wools—Spring, medium (12 mo), 11¢; scoured price, 30¢; spring fine (18 mo), 10½¢, scoured price, 34¢.

Territory wools—Montana, fine medium and fine, 10½¢; scoured price, 34¢; staple, 36¢; Utah, Wyoming, etc., fine medium and fine, 9½¢; 11¢; scoured price, 34¢; staple, 36¢.

California wools—Northern spring, 14½¢; scoured price, 35¢; middle country, spring, 10½¢; scoured price, 32¢.

Dunn & Co., in their trade review, say of the wool and woolen goods markets: "Nor is there any satisfactory demand for woolen goods, and the sales of wool for the week have been only 5,835,900 lbs. and for five weeks 34,641,400, against 28,800,150 in the corresponding weeks of 1896. The transactions greatly exceed the demands of the mills, showing an increase of 11,209 bales domestic and 258,201 bales foreign."

DETROIT PRODUCE MARKET.

DETROIT, June 10, 1897.

FLOUR.—Quotations on jobbers' lots in barrels are as follows:

Straights.....	\$4 15¢
Clears.....	4 00¢
Patent Michigan.....	4 50¢
Rye.....	2 50¢
Low grade.....	3 50¢

CORN.—No. 2, 25¢; No. 3, 24½¢; No. 2 yellow, 26¢; No. 3 yellow, 25½¢.

OATS.—Quoted as follows: No. 2 white, 22¢; light mixed, 22¢; No. 3 white, 21½¢.

RYE.—Quoted at 35¢ per bushel for No. 2. No. 3 sells at 32¢.

BARLEY.—The range of prices is from 55¢ to 60¢ per 100 lbs.

FEED.—Bran, \$10; coarse middlings, \$10; fine middlings, \$11; corn and oat chop, \$10; cracked corn, \$11; coarse cornmeal, \$11. These prices are for our local lots; small lots are \$1 per ton higher.

POTATOES.—Quoted at 22¢ per bu. At Chicago quotations on Thursday were as follows: Early Rose, 25¢; Burbanks, 30¢; 32¢ per bu. New southern selling freely at \$1 50¢ to 2¢ per bu.

BEANS.—Quoted at 65¢ per bu. for hand picked in car lots; unpicked, 40¢ to 50¢ per bu. At New York quotations on Thursday were as follows: Marrow per bu., \$1 15¢; medium, 77¢; pea, 77¢; red kidney, \$1 30¢; white kidney, choice, \$1 25¢.

BUTTER.—Market dull. Quoted at 11¢ for best dairy; good, 9¢; common to fair, 6¢; creamery, 14½¢.

CHEESE.—New Michigan full cream, 8½¢; EGGS.—Strictly fresh selling at 9½¢ per doz.

APPLES.—Quoted at \$1 75¢ to 25¢ per bu. for common to good; choice, \$3 00¢ to 25¢. Very little dried apples.—Sun-dried, 1½¢; evaporated, 3½¢.

MAPLE SYRUP.—Quoted at 85¢ per gallon for pure.

MAPLE SUGAR.—Quoted at 70¢ per lb. for Michigan, and 90¢ for Ohio.

HONEY.—Quoted at 10¢ to 12¢ in sections for white and 8¢ to 10¢ for dark comb; extracted, 50¢ per lb. At Chicago it is quoted as follows: White clover, choice, 11¢; alfalfa, 10¢; imperfection, 7¢.

BEEF.—Prime, 23¢ to 24¢ per lb.

HIDES.—Green, No. 1, 6¢; No. 2, 5¢; cured, No. 1, 7¢; No. 2, 6¢; calf No. 1, green, 7¢; cured No. 1, 7¢; No. 2, green, 5¢; No. 2 cured calf, 5¢.

POULTRY.—Spring chickens, per lb., 16¢; fowls, 8¢; turkeys, 10¢; geese, 7¢; ducks, 11¢ to 13¢ per lb. for live.

Quotations at Chicago are: Live—Turkeys, 7¢; chickens, old and young, 7¢; roosters, 4¢; ducks, 7¢; geese, 8¢; 50¢ per doz.

STRAWBERRIES.—Ohio, \$1 75¢ per bu. Michigan berries, \$1 10¢ per 16-qt case. At Chicago Michigan berries are quoted at 75¢ to \$1 per 16-qt case.

DRESSED VEAL.—Quoted at 50¢ for ordinary to good carcasses, and 6½¢ to 7¢ for fancy.

PROVISIONS.—Quotations are as follows: Mess pork..... \$8 50¢

Short mess..... 9 50¢

Short clear..... 9 00¢

Lard in boxes, 5¢, compound..... 5½¢

Pure lard, 5¢..... 5½¢

Hams, 9¢..... 9 10¢

Shoulders, 6¢..... 6

Choice bacon, 7½¢ to 7¾¢

Extra mess beef, new 7 bbl..... 7 00¢

Plate beef..... 7 75¢

Tallow 3..... 3

COFFEE.—City prices are: Rio, roasting, 15¢; fair, 16¢; good, 18¢; prime, 20¢; choice, 22¢; fancy, 24¢; Maracaibo, roasted, 20¢; Santos, roasted, 24¢; Mocha roasted, 20¢; Java 23¢.

HARDWARE.—Axes, single bit, bronze, 55¢; double bit, bronze, 55¢; single bit, solid steel, 55¢; double bit, solid steel, 55¢ per doz; bar iron, 11¢; 40¢; carriage bolts, 75¢ per cent off new list; tire bolts, 70¢ and 10¢ per cent off new list; painted barbed wire, 11¢; 75¢; galvanized barbed wire, 82¢ 05¢ per cwt; single and double strength glass, 70¢ and 5¢ per cent off list; No. 24 sheet iron, 82¢ 50¢ rates per cwt; galvanized, 75¢ and 10¢ per cent off list; No. 1 annealed wire, 11¢ 50¢ rates. Wire nails, 11¢; steel cut nails, 11¢ 50¢ per cwt, new card.

OILS.—Raw linseed, 32¢; boiled linseed, 34¢ per gal. less 1¢ for cash in 10 days; extra lard oil, 42¢; No. 1 lard oil, 33¢; water white kerosene, 8½¢; fancy grade kerosene, 9¼¢ to 10¼¢; deodorized gasoline, 90¢ per gal.; turpentine, 33¼¢ per gal., in barrel

lots, less 1c for cash in 10 days. Less quantities, 38 @ 40c per gal.

HAY AND STRAW.—Baled hay quoted as follows: No. 1 timothy, \$10 per ton; No. 2, \$8.50. Loose hay—Good timothy, \$9.00; ordinary fair timothy, \$8.00; mixed clover and timothy, \$8.00; clover, first crop, \$6.50; second crop, \$5.00. Loose oat straw, \$4.50 per ton; baled, \$4; baled wheat straw, \$4.

DETROIT LIVE STOCK MARKET.

Michigan Central Stock Yards.

DETROIT, Mich., June 10, 1897.

CATTLE.

Thursday's receipts of cattle numbered 513 head; from the west direct to butchers 133; on sale 375, as compared to 519 one week ago; average quality only fair, being mostly grassers, common to fair mixed butchers and stockers. Not many good on sale. Trade opened active, best lots of dry fed cattle sold at about last week's prices, others 10@15c lower, closing weak. \$4.50 was the highest price paid for a good steer weighing 1,180 lbs, but the bulk changed hands at prices ranging from \$2.60 to \$4 per hundred lbs. Old cows and common thin butchers, \$2.25 @ \$2.50. Bulls, \$2.60 @ \$3. Stockers and feeders, \$3 @ \$4.25. Veal calves, receipts were 150 head, one week ago 203, active, at \$5 @ \$7.50 per hundred lbs. Milch cows and springers unchanged. Receipts mostly common to fair; bulk sold at prices ranging from \$30 to \$40 each. Range from \$28 to \$45.

Reason sold Caplis & Co 20 good mixed butchers av 90 at \$3.80, and 4 cows av 93 at \$3.85.

Spicer & Merritt sold Schleicher 6 mixed butchers av 730 at \$3.

Clark & B sold Caplis & Co 4 do av 817 at \$3.50, and a fat heifer weighing 950 at \$4.10.

Curtis sold Sullivan 14 feeders av 875 at \$3.85, and 3 heifers av 713 at \$3.25; also 3 fat heifers to Marx av 733 at \$3.60.

Weeks sold Cross 4 stockers av 735 at \$3.75, and a heifer weighing 600 at \$3.35; also a good steer to Sullivan weighing 1,180 at \$4.50.

Vanburskirk sold Schleicher 7 mixed butchers av 833 at \$3.20.

Coyne sold Caplis & Co 2 good butchers steers av 905 at \$4.10, and 2 do av 735 at \$3.75.

Joe McMullen sold same 12 mixed butchers av 1,050 at \$3.45, and 2 good sausage bulls av 985 at \$2.75.

Spicer & M sold Cross 8 stockers av 847 at \$3.

York sold Sullivan 5 stockers av 700 at \$3.75; 4 cows av 955 at \$2.35; 2 bulls av 725 at \$2.75, and 24 mixed av 849 at \$3.50.

Estep sold same 14 feeders av 928 at \$4.

Spicer & M sold Mich Beef Co a good sausage bull weighing 1,440 at \$3, and 2 cows av 1,205 at \$3.35.

Ackley sold Black 2 fat heifers av 910 at \$4, and a cow weighing 1,380 at \$3; also 2 bulls to Sullivan av 1,070 at \$3.

Glenn sold Mich Beef Co 29 fair butchers steers av 1,005 at \$3.85, and 11 mixed do av 988 at \$2.90.

Sharp sold Fitzpatrick 17 mixed butchers av 1,021 at \$3.37.

Clark & B sold Sullivan 11 stockers av 660 at \$3.75.

Weeks sold Magee 7 mixed butchers av 730 at \$2.60.

Harland sold Fitzpatrick 5 good butchers steers av 940 at \$4.00.

Frazel sold Cross 4 cows av 1,017 at \$3.

Roe & Holmes sold same a bull weighing 620 at \$2.90, and 5 mixed butchers to Robinson av 1,024 at \$3.

Reed sold Magee 8 fair butchers cows av 930 at \$2.75.

Perry sold Marx 2 bulls av 610 at \$3.60.

Watson sold McIntyre 6 mixed butchers av 1,073 at \$3.25, and a cow weighing 960 at \$2.60.

Horne sold Black 10 mixed butchers av 975 at \$3.25.

Thompson sold Cross 16 stockers av 605 at \$3.75.

Heene sold Fitzpatrick 2 steers av 925 at \$4, and 6 mixed av 970 at \$3.10.

Spicer & M sold Cross 3 bulls av 483 at \$3; 23 stockers av 459 at \$3.10; 11 do av 423 at \$3.60, and a bull weighing 650 at \$3.

Weeks sold Mohr a fat bull weighing 1,100 at \$3.40.

Spicer & M sold Cook & Fry 6 heifers av 595 at \$3.40.

Patrick & Pline sold same 17 mixed butchers av 770 at \$3.75.

Estep sold Magee a fat cow weighing 1,150 at \$3.15, and 2 do av 1,030 at \$3.

SHEEP AND LAMBS.

Receipts of sheep and lambs Thursday 712; direct to butchers, 289; on sale, 443; one week ago 338. There is no change to note in quality. The few here sold early at prices ranging from \$3.50 to \$4.30 for good mixed butchers, and \$5 to \$6 for lambs. Nichols sold Hammond S. & Co 35 mixed av 99 at \$4.

Spicer & Merritt sold Monahan 11 lambs av 56 at \$6, and 6 common av 81 at \$3.

Horne sold same 29 mixed av 75 at \$3.75.

Ackley sold same 24 mixed av 55 at \$3.75.

Watson sold same 17 lambs av 55 at \$5.50.

Glenn sold Duff 20 lambs av 52 at \$5.50.

Roe & Holmes sold Robinson 24 mixed av 83 at \$4.

Patrick & P sold Sprague 22 mixed av 96 at \$4.

Reason sold Mason 25 mixed av 93 at \$3.75.

Coyne sold Hammond S. & Co 25 mixed av 100 at \$3.80.

Clark & B sold Fitzpatrick 20 lambs av 65 at \$6.

Sprague sold Mich Beef Co 68 mixed av 72 at \$4.30, and 22 do av 95 at \$3.70.

Brands sold June 14 lambs av 44 at \$5.25.

Roe & Holmes sold Mich Beef Co 20 lambs av 55 at \$5.50, and 14 mixed av 98 at \$3.60.

HOGS.

Thursday's receipts of hogs numbered 3,150; from the west direct to packers 836, on sale 2,314; one week ago 2,902; of fair average mixed quality. Market opened slow and lower. Later trade was active and all changed hands at prices 5 to 7½c lower than last Friday's closing. Range of prices \$3.45 to \$3.55. Bulk at \$3.50. Stags ½ off. Rough and heavy \$2.80 to \$3.25. Pigs \$3.65 to \$3.90. Closing steady.

Glenn sold Parker, Webb & Co 17 av 203 at \$3.50.

Horne sold same 49 av 213 at \$3.50.

Adams sold same 88 av 176 at \$3.50.

Watson sold Mertsch 31 av 161 at \$3.50.

Davies sold same 64 av 173 at \$3.50.

Spicer & M sold Farnum 37 av 177 at \$3.50.

Kelsey sold R S Webb 45 av 191 at \$3.50.

Sharp sold Hammond S. & Co 80 av 175 at \$3.50.

Frazel sold same 59 av 181 at \$3.45.

Brands sold same 63 av 174 at \$3.50.

Patrick & P sold same 124 av 187 at \$3.50.

Hawley sold R S Webb 65 av 194 at \$3.52½.

Clark & B sold same 29 av 238 at \$3.52½ and 22 av 190 at \$3.59½.

Stephens sold Parker, Webb & Co 40 av 204 at \$3.50.

Weeks sold same 64 av 182 at \$3.50.

Roe & Holmes sold same 78 av 187, 62 av 163 and 56 av 191 at \$3.50.

Spicer & M sold same 25 av 247 and 57 av 181 at \$3.50.

Roe & Holmes sold same 27 av 162 at \$3.50.

Vanburskirk sold Sullivan 61 av 176 at \$3.50.

Coyne sold same 36 av 188 at \$3.50.

White sold Hammond S. & Co 77 av 178 at \$3.50.

J McMullen sold same 107 av 179 at \$3.50.

Sprague sold same 17 av 190 at \$3.50.

Sprague sold Parker, Webb & Co 57 av 193 at \$3.50.

Wilson sold same 12 av 245 at \$3.50.

York sold same 143 av 184 and 161 av 188 at \$3.55.

Hoffman sold same 113 av 190 at \$3.50.

OUR BUFFALO LETTER.

EAST BUFFALO, June 10, 1897.

CATTLE.—Receipts of cattle on Monday last were 4,356, as compared with 4,868 for the same day the previous week; and shipments were 3,410, as compared with 3,873 for the same day the previous week. The market on Monday was dull, and fully 15@20c lower on good steer cattle, with common lots and green stock fully 25@40c off, and good dry fed steers and fat cows from a shade to 10c lower. Bulls were 15@25c lower; oxen also lower; feeders and stockers showed a decline of 10@15c; fresh cows and springers active but lower, and veal calves also showed a decline in values. Since Monday the tone of the market has been steady to firm on good lots, but weak on common and grassy lots, which are beginning to come forward in large numbers. The market on Wednesday closed dull and slow at Monday's quotations. Quotations at the close on Wednesday were as follows: Export and shipping steers—Prime to extra choice steers, 1,250 to 1,400 lbs., \$4.50 @ \$5.00; do, 1,300 to 1,400 lbs., \$4.60 @ \$4.85; good to choice fat steers, 1,300 to 1,400 lbs., \$4.60 @ \$4.75; good choice fat steers, 1,300 to 1,400 lbs., \$4.50 @ \$4.60; good to choice fat smooth steers, 1,100 to 1,300 lbs., \$4.35 @ \$4.50; coarse and rough fat steers, 1,100 to 1,450 lbs., \$3.60 @ \$4.10. Butchers native cattle.—Fat smooth dry fed steers, 1,050 to 1,150 lbs., \$4.25 @ \$4.45; fat smooth dry fed light steers, 900 to 1,000 lbs., \$4.15 @ \$4.25; green steers thin to half fattened, 1,000 to 1,400 lbs., \$3.50 @ \$4.00; fair to good steers, 900 to 1,000 lbs., \$3.70 @ \$4.10; choice smooth fat heifers, \$4.00 @ \$4.40; fat to good fat heifers, \$3.65 @ \$4.00; light, thin half fat heifers, \$3.00 @ \$3.50; fair to good mixed butchers stock, fat and smooth, \$3.15 @ \$3.85; mixed lots, fair quality fat cows and heifers, \$3.60 @ \$3.80; good smooth well fattened butchers cows, \$3.40 @ \$3.65; fair to good butchers cows, \$2.75 @ \$3.25; common old cows, \$2.25 @ \$2.75. Stockers, feeders, bulls and oxen.—Feeding steers, good style, weight and quality, \$3.50 @ \$4.00; fair to good quality feeders, \$3.55 @ \$3.75; good quality yearling stock steers, \$3.65 @ \$4.00; choice smooth fat heifers, \$4.00 @ \$4.40; export weight bulls, fat and smooth, \$3.40 @ \$3.65; good fat smooth butchers bulls, \$3.25 @ \$3.40; fair to good sausage bulls, \$2.90 @ \$3.25; thin, old, common bulls, \$2.00 @ \$2.75; stock bulls, \$2.85 @ \$3.25; fat smooth young oxen, to fit for exports, \$3.00 @ \$3.25; fair to fairly good partly fattened young oxen, \$3.40 @ \$3.75; old, common and poor oxen, \$2.30 @ \$2.40. Veal calves.—Common to fair, \$3.50 @ \$4.50; good to choice, \$4.75 @ \$5.25; prime to extra, \$5.00 @ \$5.75. Milch cows.—Strictly fancy, \$3.40 @ \$4.25; good to choice, \$3.20 @ \$3.80; poor, \$1.60 @ \$2.50; fancy springers, \$3.80 @ \$4.00; fair to good, \$3.20 @ \$3.80; common milkers and springers, \$1.40 @ \$1.60. Thursday the market ruled steady at Monday's prices.

SHEEP AND LAMBS.—Receipts Monday were 15,000 as compared with 13,900 the previous Monday; shipments were 8,000 as compared with 9,000 same day the previous week. The market on Monday was about the duldest of the season, and values dropped 15@25c per hundred below those ruling at the close of the week. The prime wethers brought \$4.45, and the top lambs \$5. Since Monday the market has ruled firmer, and extra sheep for export sold at an advance on Wednesday, while fair to good sheep and lambs sold about steady. Spring lambs are in large supply, and are selling 50@75c lower than last week. Quotations at the close on Wednesday were as follows: Clipped sheep—Prime to fancy wethers and yearlings, \$4.25 @ \$4.35; good to choice handy sheep, \$3.90 @ \$4.15; common to fair, \$3.50 @ \$3.75; hands and common, \$2.25 @ \$2.50. Clipped lambs—Fancy handy, 75 to 85 lbs., \$4.50 @ \$4.80; good to choice, 75 to 85 lbs., \$4.00 @ \$4.20; fair to good, 65 to 70 lbs., \$3.25 @ \$4.00; common to good, \$3.25 @ \$4.20; export lambs, 95 to 110 lbs., \$4.75 @ \$5.00. Spring lambs—Good to choice, \$5.00 @ \$5.50; fair to good, \$4.50 @ \$4.90; culls and common, \$4.00 @ \$4.25. Thursday the market was firmer; choice lambs sold at \$4.90 @ \$5; fair to good, \$4.60 @ \$4.80; culls to fair, \$3.75 @ \$4.25; sheep, steady; choice wethers, \$1.25 @ \$1.40; mixed, \$3.75 @ \$4.10; culls, \$2.50 @ \$3; outlook more favorable.

HOGS.—Receipts of hogs on Monday last were 16,920, as compared with 27,720 for the same day the previous week; and shipments were 10,780 as compared with 17,640 for the same day the previous week. Receipts were light, and the market ruled firm and slightly higher than at the close of the week. Towards the close of the day business dragged a little, but finally about everything was closed out, with last sales a little lower than the opening. The advance noted on Monday has been maintained, and quotations on Wednesday were 2½ @ 5c higher than on the same day the previous week, but the market closed dull and weak. Quotations at close on Wednesday were as follows: Good to choice light medium Yorkers, 160 to 180 lbs., \$3.65 @ \$3.70; good to choice pigs and light Yorkers, 135 to 150 lbs., \$3.70 @ \$3.75; mixed packing grades, 150 to 200 lbs., \$3.40 @ \$3.50; fair to best medium weights, 210 to 280 lbs., \$3.65 @ \$3.67; good to prime heavy hogs of 370 to 500 lbs., quotable, \$3.65; rough, common to good, \$3.15 @ \$3.25; stags, rough to good, \$2.25 @ \$2.50; pigs light, 100 to 120 lbs., good to prime corn fed lots, \$3.70 @ \$3.75; pigs, common, thin skippy to fair quality, \$2.75 @ \$3.50. Thursday the market was dull and lower; Yorkers sold at \$3.65; pigs, \$3.70; mediums and heavy, \$3.60; all sold that were offered.

CHICAGO.

UNION STOCK YARDS, June 10, 1897.

CATTLE.—The receipts for last week were 43,643 against 47,934 for the previous week, and 47,428 for the corresponding week in 1896. Up to and including Wednesday of this week the receipts have been 35,400, as compared with 32,828 for the same days last week, an increase of about 2,500 head. On Monday the receipts were heavy, but this fact did not seem to inspire the market, values holding steady with the close of the week, and one lot of prime steers selling at \$5.30, the highest price in three weeks. Taken altogether, the market for all classes of fat cattle, steers, heifers, and cows, also bulls, was generally satisfactory to salesmen and owners. The pens were cleared early of all desirable stock, about everything going over the scales before 12 o'clock. Since Monday the market has held about steady. On Wednesday the general market opened rather active, with prices fully as strong as on Monday for fat cattle that were wanted either by domestic shippers, exporters or dressed beef buyers; about everything in that line sold steady to strong. Toward the close the receipts turned out somewhat heavier than at first reported, hence steers shading below the best went off a trifle lower than on Monday. All kinds of butchers' stock from bulls to fancy cows and heifers sold fully as good as on Monday. Texas cattle showed no change since Monday. But few stockers and feeders on sale. Extra shipping steers sold at a range of \$5.10 @ \$5.25; choice, \$4.85 @ \$5.05; good average steers, well finished, \$4.50 @ \$4.80; fair quality steers, \$4.25 @ \$4.45; common and ordinary, \$3.75 @ \$4.15; heifers, common to choice, \$3.25 @ \$4.50; cows, \$2.50 @ \$4.25; bulls, common to choice, \$2.25 @ \$3.75; veal calves, \$4.35 @ \$5.25. Thursday receipts were estimated at 9,500 head. The market ruled quiet, steady and unchanged, the best steers selling up to \$5.15.

SHEEP AND LAMBS.—Receipts for the past week were 62,428 as compared with 58,935 the previous week, and 77,253 for the corresponding week in 1896. Up to and including Wednesday of this week the receipts have been 45,739, as compared with 45,573 for the same days last week, an increase of 3,000 head. On Monday receipts showed a large increase, and generally of common grassers and undesirable stock. The first western grass sheep (fed a little corn) sold at \$3.70 @ \$3.80; a few good Texans sold at \$4.25. A big lot of mixed sheep and lambs, about half-and-half, from Arizona, averaged 85 and sold at \$4.35. Native sheep sold at \$4.45 @ \$4.50 for poor, and for \$4.50 @ \$4.75 for the best. There was a bunch of clipped Colorado lambs on sale, for which \$4.90 was the best offer; prime lambs in fleece sold at \$5.45; poor and common native lambs sold at \$4.45 @ \$5; spring lambs sold at \$4.45 @ \$4.50 for poor and common, and \$5.25 @ \$5.75 for the best; springers were a good 25c lower than last week. Since Monday values on both sheep and lambs have declined. Wednesday native sheep, of which there was a larger number on the market than for many a day, sold at \$4.45 @ \$4.50 for the common kinds, with a few prime lots at \$4.60 @ \$4.75. No western sheep sold. There were a few Texans here that have been selling at \$3.85, that would not bring over \$3.70 @ \$3.75 to-day. Clipped lambs sold at \$4.25 @ \$4.50 for poor and thin, and \$4.60 @ \$4.65 for the best. There were several lots of Colorado lambs in fleece on the market, but up to a late date none had been sold. Such that brought \$5.40 yesterday, to-day a salesman would have been glad to take \$5.30 @ \$5.35. Spring lambs sold at \$4.45 @ \$4.50 for poor and common, and \$5 @ \$5.50 for the best. They weighed from 54 to 68 lbs. On Thursday estimated receipts were 10,000. The market ruled steady at Wednesday's closing prices.

HOGS.—The receipts for last week were 160,107 against 207,633 for the previous week, and 151,631 for the corresponding week in 1896. Up to and including Wednesday of this week, receipts have been 101,416, as compared with 88,999 for the same days last week, showing an increase of about 13,000 head. Early sales on Monday showed prices about steady as compared with the close on Saturday, but later on the market weakened and at the close values were about a nickel lower on all good heavy and good mixed, the final wind-up showing a weak market and many lots unsold. Rough and common \$2.20 @ \$2.25; good to prime heavy packers and good mixed, \$3.45 @ \$3.50; prime mediums and butcher weights, \$3.50 @ \$3.55, largely \$3.52½. Prime light, \$3.55 @ \$3.57½. Since Monday there has been a decline of 5c. Wednesday the market was unsettled and unsatisfactory. Rough packers sold at \$3.15 @ \$3.25; prime heavy packers and good mixed, \$3.40 @ \$3.45; prime mediums and butcher weights, \$3.47½ @ \$3.50; prime light, \$3.50 @ \$3.55. Receipts on Thursday were estimated at 28,000. The market ruled fairly active, but 2½c lower than Wednesday night, \$3.35 @ \$3.52½; mixed, \$3.35 @ \$3.47½; heavy, \$3.15 @ \$3.45; rough, \$3.15 @ \$3.25.

ADULTERATED CLOVERSEED.

G. H. Hicks, who is in charge of the pure seed investigations being carried on by the Department of Agriculture, says that the attention of the Department has been recently called to the fact that a large consignment of red cloverseed, adulterated heavily with "trefoil" or black medick (*Medicago lupulina*), has been imported into this country by an Eastern seedsmen. This seed is now offered for sale in various parts of the United States at a somewhat lower price than pure seed. Farmers throughout the country should be on their guard against it, as black medick will prove a costly weed if introduced into pastures. A sample of red cloverseed, probably from this lot, was recently submitted to us for examination by a seed dealer in Indiana, who suspected that it was not reliable seed, and was found to contain "trefoil" seeds at the rate of 80,000 to the pound! The seed of this pest resembles closely that of red clover, both in shape and size, and is almost sure to be overlooked by the majority of persons. The Department of Agriculture will examine, free of charge, any samples of cloverseed suspected to contain this or any other bad seeds. Such samples should be sent to the Seed Laboratory, Division of Botany, accompanied by a statement of the price asked per pound and the name of the seedsmen offering the same for sale. Farmers should buy their seed from reliable dealers only, and, if possible, use American-grown seed.

AN ESSAY ON MAN.—Man that is born of woman is few of days and full of microbes. The moment he hits the earth he starts for the grave, and the longer he travels the faster he goes. His visible reward for long days of labor and nights of walking the floor with a teething baby is an epitaph he can't read and a tombstone he doesn't want. In the first of the seven ages of man he's licked, in the last he is neglected, and in all the others he's a target for the lying, meddlesome mischief-maker—a woman who won't tend to her own business. If he does not marry his first love he'll always wish he had, if he does he'll always wish he hadn't.

Yet no man ever follows freedom's flag for patriotism (and a pension) with half the enthusiasm that he will trail the red, white and blue that constitutes the banner of female beauty. He will brave the lion in his den, face the booming cannon, tread the ocean foam beneath his feet, and yet will tremble like a half-frozen, egg-sucking duck when called to account by his wife for his cussedness. He goes forth in the morning to plow corn with a cross-eyed mule and a roan steer, works hard all day, and comes home at night to find his seven half-clothed children hungry as bears and no bread in the house, and his wife over to one of the neighbors to borrow a hat to wear to a church social.—*Troy (Kans.) Times.*

A CLERGYMAN who recently called upon a young widow to condole with her upon the loss of her husband, placed considerable emphasis upon the proposition that the separation was merely temporal, and painted in vivid colors the happiness of friends reunited after death. When he stopped for breath, the sorrowing one heaved a deep sigh, and quietly remarked: "Well, I suppose his first wife has got him again then."

When writing to advertisers please mention the Michigan Farmer.

WHAT IS YOUR TRADE?

Each Trade or Occupation Has Its Special Disease.

It is well known among medical men that certain diseases are more readily developed in certain occupations than in others. That each occupation has its attendant physical weakness. Engineers, railroad men and similar occupations suffer mostly from kidney troubles and men who are often exposed to the weather suffer from rheumatism, while clerks and professional men, in fact the army of people whose business keeps them indoors, are oftentimes great sufferers from piles and constipation. In this connection the following letter is of interest to people whose occupation will not allow sufficient outdoor exercise.

Mr. A. F. Calhoun, notary public and jeweler and watchmaker of Circleville, W. Va., writes as follows:

I had been a severe sufferer from piles for years and had tried many remedies with but little benefit, when about three years ago I saw the Pyramid Pile Cure advertised and sent for it.

I was badly afflicted when I got them, but after only two applications the piles disappeared and from that day to this I have never felt a symptom of the disease.

I feel that I cannot recommend them too highly to sufferers from piles.

The Pyramid Pile Cure is free from cocaine, opium or any mineral poison, absolutely safe, pleasant and painless; sold by druggists at 50c. per package. If there is any constipation the Pyramid Pills should be used with the pile cure. The pills are 25c. per package.

Any druggist will tell you that the Pyramid is the best known and most successful and popular pile cure ever placed on the market and its reputation as a safe and radical cure has only resulted from the personal recommendation of people who have been cured of this distressing ailment.

Send to Pyramid Co., Albion, Mich., for valuable little book on cause and cure of piles.

WANTED TO CORRESPOND with parties that can catch SNAPPING TURTLES in large quantities. Address H. E. FEARNLEY, 42 Exchange Block, Providence, R. I.

HAY-STRAW-HAY

We want to BUY 50 CAR LOADS, and will pay Highest Cash Price. Write to us. JOHN L. DEXTER & CO., Detroit.

Established 1866. JOHN HUGHES, HIRAM WALTZ, JOHN BENSTEAD. **SWOPE, HUGHES, WALTZ & BENSTEAD,** Live Stock Commission Merchants, No. 4 Exchange Building, EAST BUFFALO, - N. Y.

SILBERMAN

W DON'T SHIP YOUR WOOL W

until you have corresponded with us. We think we can demonstrate to you that this course will be to your best interest. We are in a position to sell your product direct to the manufacturer because we are large handlers and have always sufficient stock on hand to meet his requirements. Our commission charges are as low as they can honestly be made. Thirty-one years experience in this business has taught us many things that are of value to you. We make liberal advances on consignments of wool and supply the sacks free. We can give you any kind of reference you desire. Our circular letter will keep you posted on the market. Write for it and other pointers on the situation.

SILBERMAN BROTHERS, 122-124-126-128 MICHIGAN STREET, CHICAGO, ILL.

BROTHERS

Horticultural.

For the Michigan Farmer.

SUMMER CARE OF FRUIT TREES.

When I was returning from the nursery this spring with a load of fruit trees, a farmer accosted me and in a jocular way said, "What is the use of your setting out those trees; you will never care for them when they are set and your money will only be thrown away." I asked him, "What makes you think so?" and he replied, "Most farmers never notice a tree again after it is set." I told him I hoped I was an exception, for it was my intention to care for them as I would a cornfield.

Although he exaggerated the facts in making the statement, yet there is more truth than poetry in it, after all. The farmer who made these remarks was one of that type who judged others from his own standpoint; he is one of whom I solicited subscription to the MICHIGAN FARMER last winter, and he made the remark at the time that "the farm papers could learn him nothing," which I admitted was true.

This incident I cite merely to impress more forcibly the importance of summer care of fruit trees and the proper training of them.

Aside from cultivation, pruning is the most essential feature of tree growing. A great many trees die from exhaustion from neglect of pruning. When a tree is taken from the nursery it has a full top and should have an equal proportion of roots. The tree contains enough sap to sustain life until new roots are formed and it has again established itself in the soil.

During this time the branches and leaves are drawing on that store of sap in the tree and when this is exhausted, if no new roots are formed, the tree dies. The amount of pruning at time of planting depends greatly upon the kind of tree set; peaches require much more pruning than plums or pears. A tree which has an abundance of fine, fibrous roots will sustain a greater top than one with a few large ones.

When new growth is started, the rubbing off and cutting out of weak shoots and those which would tend to grow an ill-shaped top, should be closely practiced. The heads of trees should be fairly open to admit light and air that the fruit may color and ripen evenly. A low-head tree is most desirable, as it is the most economical when gathering fruit and is less exposed to the force of the wind.

The training of a tree the first season from planting determines its future shape as well as life.

KALAMAZOO Co., Mich.

For the Michigan Farmer.

THE GARDEN.

If there is any virtue in "kicking," we will enter a protest here and now. The bulletin for March and April from the Michigan station reached us the middle of May. It contains interesting and valuable information, but it would have been far more useful had it reached us two months earlier. Why should it not have been issued in January or February? Could we have known in time that Adams' Extra Early corn reached edible maturity in the shortest time of any, it would have been useful information as well as interesting, but we do not see that it will do us much good now after the early corn is planted. It is some satisfaction to know that the Alexander tomato is the earliest, and that the Ponderosa, Crimson Cushion, and Ferris Wheel are as good as the best for late, large and long-keeping fruit, but the information comes rather late for this year.

It is not our purpose to make any adverse criticism on the work done by the stations, as we believe our progressive farmers find it of great value. But the importance of the information given depends much upon its timeliness. If a bulletin reaches a man before the season of the year when needed, he may act upon its suggestions, but if it comes too late the chances are that not one in ten will be kept till another year.

A writer in one of the agricultural journals not long ago advised that the tomato vines be collected and burned in the fall. This, it was claimed, would prevent the rot. Undoubtedly this would do much good in preventing the disease from spreading, but we believe it is spread much easier than might be inferred from this. Three years ago we set plants in a field where tomatoes had never been raised, and so far as we know none had ever been grown within a quarter of a mile. From the earliest till the latest the fruit was badly affected, much of the crop being ruined by the disease. In this case it was hardly possible that the rot was communicated by the ground, unless from the soil that came with the plants from the hotbed, which was not probable. More likely the spores were carried some distance through the air, half a mile or more, and as the season was favorable they grew and spread rapidly after once getting a start. As the ground and that near it has not been used for tomatoes since, we have no experience as to the results afterwards. We have had so little trouble with the rot in other places

that it has not seemed necessary to spray with the Bordeaux mixture, which is considered a preventive for this trouble. These fungous diseases are not yet well understood. It may be that our common weeds and grasses are full of the seeds which only await the opportunity to develop on the cultivated vegetation.

The tomato holds such an important place in the garden that it is hard to believe it was brought into this country only a century ago, yet such seems to be the truth, and it was thirty years later before it was grown for market. Those who remember the uncouth, ill-shaped fruit raised thirty years ago do not wonder that the tomato was slow in making friends. The waste in preparing it for the table must have been very great, aside from the other objections.

No vegetable in common cultivation is more readily affected by selection than the tomato, as the numerous varieties show, and for this reason seedmen have given much of their attention to it. They have made it early and late, solid, large, smooth, and varied in shape, but one point has been neglected. They have not yet given us a variety that can be depended upon for sowing in the open ground for a main crop, though a few years of judicious breeding might reasonably be expected to accomplish that result. Plants frequently come up in the garden after the time for frosts has passed, and mature their crop before there is danger of injury in the fall. It would be a great saving of time and labor if the tomato could be raised without the necessity for starting the plant in the house or in a hotbed. Early fruit could not be expected in this manner, but unless it is grown for market, only a few early plants are needed. The main crop may just as well be late. Gardeners say that the tomato grows best when transplanted two or three times, but we have seen some of these self-seeded plants that have made a rapid growth and borne good, heavy crops.

Experienced men say that the characteristics of the seed depend more upon the nature of the plant than the individual fruit. This is something of importance to those who save their own seed. If earliness is desired, select from a plant which matures the bulk of its crop early, rather than from one which ripens a few premature specimens in advance of the others. The same rule will apply in case size, firmness, or long-keeping qualities are desired.

It may surprise many to be told that cows will eat tomatoes. Some years ago we saw an article in the FARMER which recommended feeding the surplus to the dairy herd. The effect on the tomatoes we know from experience. A cow will eat them, especially if she can steal them. As to whether they do her or the milk any good we cannot say, but we would hardly venture to raise them for that purpose.

Our greatest pest in the garden is purslane, which seems to have more lives than a cat. So long as a joint is left it will keep green, and mature a seed pod if there is one attached. In France, it is cultivated in the garden, and comes upon the table among the respectable vegetables. If it should come to us under its foreign name, in a free seed package from the Department of Agriculture, we would welcome it to the best corner of the garden. Till then we would prefer that it remain on some uninhabited island in the sea.

The Farm Journal gives the following cure for the squash borer: Dissolve an ounce of saltpeter in a gallon of water, and pour half a pint of the liquid about the roots of the vine. Mix kerosene with coal ashes, enough to make a strong odor, and put around the hill. If there is a chance to save the squash from this pest, the remedy is certainly worth trying. If no coal ashes were at hand we should try road dust, clay, or even sawdust. We do not usually have much trouble with the squashes in the cornfield, but with those near the barns, about the grounds where vines have been grown for years, the borers have the best of it.

It is claimed that kerosene on melon vines is considered by the broad-backed squash bug as a very urgent invitation to leave. It should be mixed with some kind of dry substance, like land plaster, and a handful applied to each hill. The horticulturist finds many uses for kerosene, but if it will keep away melon beetles and borers it will be almost indispensable. F. D. W.

For the Michigan Farmer.

TASTE IN THE GARDEN.

Women are now more interested in gardening, and very few back yards but what have something planted, even if it is sunflowers or morning-glories. But there is often a lack of taste and a rag-baggy look about the beds that would not be tolerated in sitting-room or parlor. Too many kinds are often jumbled in together, and not enough space given to each, to show off to advantage. I did not know what a beautiful plant the balsam is until I gave it plenty of room and the flowers came all down the stalk, instead of a few at the top, as when they were close together.

One of the most delightful things about gardening is to study combinations of colors and the fitness of plants for the place. One spring I put the violets near the bleeding-heart and for a month enjoy-

ed the rosy pink and the delicate blue of the flowers. Yellow is important to set off the colors, but be careful not to have too much of it. One woman's front yard was full of double sunflowers, marigolds and yellow zinnias. The effect was really dreadful, for it made one feel bilious. Some of the set designs are really hideous. In a certain park one suddenly comes across a cow leaning against a bank, as large as life, horns and all. A little way from that is a pitcher of beer in the center of a grass plat, made of echeverias. The only good thing about them is that they cause a hearty laugh, and that is wholesome.

Be careful in your selection of flowers for sick or sorrowing friends. Strong-scented ones are to be avoided. Some tuberoses were sent to a young mother who had lost her baby. Similar flowers had been placed on his little coffin and the smell of them brought back the bitter sense of loss and threw her into convulsions of grief. Set designs, too, are often strangely selected for the house of mourning. A young man died from the effects of a fall from his bicycle, and his friends could hardly look, without a shudder, upon a piece sent by a well-meaning but thoughtless friend,—a bicycle made of white rosebuds.

Remember, when you are planning for the garden, that the plants and flowers ought to be seen and not their surroundings. So avoid red painted window boxes, clam-shell borders and scarlet, iron pots hung between three poles. Studying adaptation and taste makes gardening three times as interesting.

ANNA LYMAN.

THE CURRANT FLY.

BY PROF. F. L. HARVEY, MAINE EXPERIMENT STATION.

This species was first considered by Loew in 1873, from a single faded female contributed by Osten Sacken. Osten Sacken's material may have come from Maine, as he gives Norway, Maine, as the locality, the specimens having been collected by S. J. Smith. Loew gives Canada as a locality upon the authority of Mr. Provancher. How long the species had been known before it was described does not appear, but Osten Sacken says it "seems to be common in those regions." If its habit of infesting currants was known in 1873, no mention is made of it. It is next considered by Saunders in 1883. During the intervening ten years its currant infesting habit became known and some attempts were made to determine its life history.

In 1891, Prof. Gillette found it very abundant in Colorado, infesting gooseberries, this being the first authentic account of its infesting that fruit. Prof. Gillette also added many facts regarding its life history.

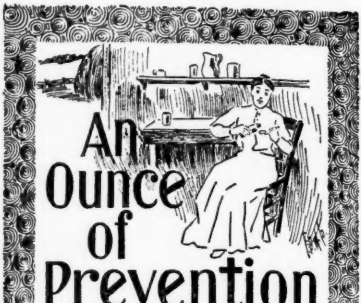
We find no reference to this insect in the Agricultural and Horticultural Reports of Maine, and if it has done injury heretofore it has not been recorded.

Mr. Z. A. Gilbert says he was formerly troubled by such an insect, but stopped growing currants for a time and then resumed and has not been troubled since. Mr. D. H. Knowlton, Farmington, says his currants have been infested for several years.

It is quite certain that *Epochra Canadensis*, Loew, is a native American species, distributed throughout the northern part of the United States, and in Canada, extending from the Atlantic to the Pacific coast.

This insect is widely distributed in Maine and is capable of doing great injury to currants and gooseberries and growers of these berries should become acquainted with it and be on the lookout for its depredations. GENERAL DESCRIPTION.—Perfect insect a two-winged fly about the size of a house fly. Pale yellow or orange with greenish iridescent eyes and dark bands across the wings. Found about currant and gooseberry bushes from the last of May and through June in Maine. Stings the currants, depositing an egg under the skin, that hatches and develops into a small white maggot causing the fruit to turn red and drop prematurely. The maggots when grown leave the fallen or hanging fruit, enter the ground, change to the pupa state from which the fly emerges the following June.

LIFE HISTORY.—The flies emerge the last of May or early in June, depending on the season and location of the bushes. The time of emergence extends over about three weeks. The flies live about a month. They mate soon after they emerge and begin laying eggs, selecting the larger currants at the base of the bunches first and depositing eggs in the others as they attain sufficient size until the eggs are all deposited. It often happens that several currants at the end of the bunches are not affected and later develop good fruit. Usually only one egg is laid in a currant. The flies are capable of laying at least two hundred eggs and as they live only about a month must lay several every day. The fly when about to lay an egg lights on the currant and in a nervous, restless manner keeps the wings in a constant fanning motion. She often examines several currants before finding one to her fancy. Usually one of the large currants in the upper part of a bunch that is in the shade is selected. The eggs are laid one in a place at one side of the puncture made by the ovipositor and so close to the skin of the currant that they can usually be plainly seen through it. The eggs are opalescent, white, oblong and



An Ounce of Prevention

—you know the rest. In this case it consists in taking a few bottles of that thoroughly reliable life-saver

Warner's Safe Cure

After the long winter of inactivity you may find the spring work and the hot sun more than you are able to bear. You may be debilitated; your liver may not be working well; you may have dyspeptic tendencies. The above remedy will fix you up and make you feel good as new. It is an infallible cure for

**BRIGHT'S DISEASE
URINARY TROUBLES
FEMALE COMPLAINTS
GENERAL DEBILITY
AND MALARIA.**

It is entirely a vegetable compound. Beware of substitutes. There's nothing so good as Warner's Safe Cure.

pedicellate and about one-twenty-fifth of an inch long. They soon hatch into a white footless maggot with thirteen segments to the body, the head armed with a pair of black parallel retractile hooks, the rasping organs of the maggot. The larva requires about three weeks to mature, when it is about one-fourth to one-third of an inch long.

When hatched the larva is about one-twenty-fifth of an inch long and as soon as it emerges from the egg begins to travel, often leaving a delicate light colored trail close under the skin which can be seen through it. After traversing from a third to a half the distance around the currant it locates, entering in most cases one of the seeds, disappearing entirely within it. Sometimes the larva locates near the puncture and sometimes the exit hole is on the opposite cheek from the puncture. As it grows the head finally protrudes from the seed. After feeding upon the contents of a seed and having grown too large to find lodgment within it, it locates between the seeds in the pulp and then gnaws holes in the seeds, eating the contents of one after another until often half a dozen are consumed before the larva is grown. It seems to reject the coats and the clear gelatinous envelope that surrounds the seeds. The refuse of the seeds eaten turns black and becomes cemented together. A black spot becomes visible through the skin. The location of the larva can be told readily as the currant infested soon begins to show a clouded appearance where it is located and finally turns red and a black spot appears. Infested fruits ripen earlier. Often a half-grown larva will be found with the head end half buried in a seed. Finally when full fed the larva gnaws to the surface and cuts a circular hole with ragged edges through the epidermis by means of which it emerges.

The larvae often leave the fruit before it drops, but fully half or more are still in the currants when they fall and remain there a greater or less time. The currants often drop before the maggots are mature. When ready to transform, they leave the currants, enter the ground under the bushes, usually less than an inch, shorten up and assume the pupa stage in which they remain, gradually transforming into the fly, until the following spring when they appear, there being but a single brood.

REMEDIES.—We have had no experience with this insect as it is new to Maine as an injurious species. From a study of its life history we discover only one vulnerable point. The insect spends nearly eleven months of the year in the ground. In the winged stage it cannot be destroyed so far as we know. The eggs are deposited under the skin of the fruit and spraying would do no good. Part of the infested fruits drop prematurely and the worms remain in them for some time before they emerge and go into the ground. Based upon this last habit we would recommend gathering the fallen currants frequently and burning them. This remedy cannot be relied upon to destroy all the flies, as quite a number of maggots leave the fruit before it falls. It can be depended upon to destroy fully half if not more and can be employed to keep them in check.

Our western correspondent, Dr. W. A. Thornton, thinks that allowing young chickens about the bushes early in the season and large fowls later, after the fruit is gathered, will keep them in check.

As the pupae are found only about an inch below the surface, they could be destroyed with little trouble by removing the soil to that depth from under the bushes and burying it deep or depositing it on a road or some exposed place.

Deep spading and turning to bury the pupae, or stirring the surface of the soil

after cold weather so as to expose the pupae are methods worth trying.

As these flies are weak and liable to perish if any obstruction is offered to prevent their coming out of the ground, we would recommend a mulching of coarse straw or hay, several inches deep, placed under the bushes and out as far as the branches extend, and well packed.

The maggots are footless and unable to crawl much. Taking advantage of this fact we intend to try this season putting a receptacle under the bushes to catch the falling maggots and infested currants when they fall. A cheap grade of tar paper will be used. Strips will be placed each side of the row and fitted closely where they meet, and an inch cleat tacked along the outer and upper edge and at the ends. The paper will slope away from the bushes. It can be made in sections and stored for use a second season. It should be put under the bushes about June 15th., and remain until the worms all leave the fruit, or about August 1st., when the fallen fruit and pupae in the receptacles should be carefully collected and burned. But few of the maggots could escape this treatment.

We have not discovered any parasites to help check the pest. Short bearing years would tend to reduce the numbers.

THE PLUM ORCHARD.

The following notes on the plum orchard are taken from a bulletin prepared by the horticultural department of the Cornell University experiment station:

Coming to the general question of plum growing, it may be said that the plum is emphatically a special fruit; that is, it is one which does not have a regular standing in the market as pears, apples or even peaches have, but is more or less dependent for its sale upon the general supply of other fruits. In other words, it is a fruit of secondary importance, so far as the market is concerned. This being the case, it will readily be seen that it is not a difficult matter to overplant for the plum market. In western New York, the industry has been developed to a very important extent, but the production of fruit has probably not yet reached its zenith. Many of the orchards have been planted with no particular forethought, but largely because some one else had done well with his plantation. It would be easy to figure up the prospective crops from the plum trees which are now growing in western New York and to see that the product would very likely overstock the market. But it must be remembered that probably not more than half of these trees will ever produce full crops of fruit. The same remark will apply to any kind of fruit which is set in large quantities. The success of fruit-growing is so intimately connected with the thoroughness, care and business ability of the grower himself, that one can never prophesy what the results of any fruit industry are likely to be. In every fruit business there are likely to be a great many failures, from the commercial standpoint, and only a few pronounced successes.

The plum thrives upon a variety of soils, but it generally does best when planted upon clay loam. It usually thrives best upon lands which are suited to pears, or upon the heavier lands which are adapted to apples. Yet there are many varieties which thrive well upon lands which are comparatively light and sometimes almost sandy.

The stocks upon which plums are grown are very various. By far the greater number of the trees in the north are now grown upon the myrobalan stock, which is a species of rather slow-growing plum, native to southeastern Europe and southwestern Asia. This is the stock which is sometimes recommended in the older fruit books for the making of dwarf trees; but unless the top is kept well headed in, the trees generally make normal growth upon it. Trees grown upon this root are usually larger and finer at one or two years of age than those grown upon other plum stocks, and the probability is that they are nearly as useful from the grower's standpoint as any other. However, there are some varieties which overgrow the myrobalan, and the stock is very likely to sprout from the ground and thereby cause trouble. I am convinced that the most ideal stock, from the standpoint of the grower, is the domestica plum itself, but it is more difficult to secure seeds of it, the stock is more variable and it is more likely to be injured in the nursery row by the leaf fungi; therefore, as a matter of practice, the myrobalan has very generally supplanted it. In the south-eastern states the peach is largely used as a stock upon which to grow plums and it seems to be gaining favor in the north. It is undoubtedly a very excellent stock for sandy lands, and, in fact, is probably more preferable for such lands than the myrobalan itself. Some varieties—of which the Lombard and French Damson are examples—do not take well upon the peach. The Japanese plums are commonly worked upon the peach stock and they seem to make an excellent union with it and to give every promise of being hardy and durable. The Marianna stock, which is much recommended in the south, has not found great favor in New York.

Many of the varieties of plums are such slow and crooked growers in the nurseries that it is advisable to graft them or bud them upon some strong and straight stock. The Lombard is no doubt the best stock for this purpose which is now grown by nurserymen. The old Union Purple is one of the very best of stocks, but it is not grown much at the present time. All such varieties as Reine Claude, German Prune, Copper, etc., are probably best when top-worked upon some such stock.

Plum trees are usually planted when two

years old from the bud, although some of the strong-growing kinds may be planted at a year old with the very best results. As a rule, plum trees are planted about as far apart as peaches are, that is, from 15 to 18 feet apart each way. Many growers prefer to plant them closer one way than the other and eventually to stop cultivation in one direction. If this system is used, they may be placed 18 or 20 feet apart one way, and from 10 to 12 feet the other way. The trees are pruned in essentially the same way that apple trees are, when planted. It is generally advisable to start tops as low as possible and yet allow of the working of the curculio catcher below them. This means that the limbs should start out from three or four feet above the ground. With the modern implements and methods of tillage, there is no inconvenience in working the land if tops are started as low as this.

The subsequent pruning of the plum tree has no special difficulties. About four or five main limbs are allowed to form the framework of the top, and in most varieties, especially those which are not very tall growers, the central trunk or leader may be allowed to remain. There is constant demand for information as to whether young trees should be headed-in. There can be no positive answer to this question. If the trees are growing very vigorously, so that they become too tall and whip-like, it is best to head them in; but it must be remembered that this redundant growth commonly ceases and the tree begins to spread when the bearing time arrives. If trees are making too vigorous growth, the real corrective of the difficulty is to stop the growth by withholding fertilizers or cultivation rather than by heading-in the tree. Vigorous heading-in only makes the growth the stronger. All this is a very different matter from the customary heading-in of old trees. Some growers prefer to let a plum tree take its natural open, spreading growth, whilst others desire to keep it sheared in to allow the trees to be planted closer together and to keep the fruit nearer the center of the tree. This is very largely a matter of personal preference and there are probably no very decided advantages in either system when it is carried out systematically and conscientiously. For myself, I believe that the heading-in of plum trees is practiced to too great an extent in western New York, but I should by no means be dogmatic in this opinion. It should be said that the plum tree will need pretty careful attention from year to year to keep the top in shape, to cut out and paint over all injured places and in other ways to protect the tree from accidents and from injuries of storm and insects.

In common with all fruits, the plum demands good tillage and liberal feeding if satisfactory results are to be obtained. The extended remarks upon the tilling and fertilizing of fruit lands which are made in our Bulletins 62, 102, 103, and also 119 and 120, apply with full emphasis to the plum. Well-tilled trees should begin to bear when three years set, and, at eight and ten years of age, the prolific varieties should be bearing three bushels of first quality fruit in every good year.

WHITE PINE REPRODUCTION.

The question of the reproduction of white pine is being discussed by those interested in forestry. Prof. L. C. Corbett, of the West Virginia University, in an article in the *Southern Lumberman*, says on this subject:

The opinion generally held is that the natural rotation in varieties of forest trees is a necessary result of an impoverished condition of the soil; that one generation takes a different food from the one that follows it, and for this reason the species that held possession of the land is unable to perpetuate itself. The idea of soil impoverishment under natural forest conditions is in direct opposition to all modern theories of the soil deterioration. It is held nowadays that the forest is the great restorer of plant food, and the one crop borne by nature which leaves the soil better for having sustained it.

It is, therefore, quite out of the question to explain forest rotation or the succession of species by the theory of deficiency in nourishment. Even if we were to specialize and attribute the phenomenon to a single ingredient of plant food, the hypothesis would still be inadequate; for all classes of forest trees take the same foods in slightly varying proportions only.

Now that variation in the condition of the soil does not serve the purpose, let us consider the reproductive organs of the plant. The pine family is capable of producing, and frequently does produce, an abundant seed crop. Failure to reproduce cannot, then, be attributed to lack of seed production. Are these seeds prepared to withstand adverse conditions? No; they have no hard, nutty covering as do those of the oaks and hickories. The seed, while provided with wings to facilitate its transportation, soon loses its vitality if exposed even to the conditions of the natural forest. In other words, the pine seed must find congenial circumstances for germination soon after it is shed from the cone, or it perishes.

Pines do not produce seed each year in succession, and consequently the loss of the seed crop of one season may delay a stand of young seedlings for several years. Young seedlings of all classes are particularly tender as regards adverse surroundings, and this is especially true of the pine. When favorably lodged, however, the seeds of the pine germinate readily, and the young seedlings thrive, but with the American lack of system in forest management, these congenial conditions for the germination of the seed and the development of the young pine are seldom met with. When it happens

that the necessary environment is present, the white pine reproduces itself readily.

Since, then, other species are more commonly the successors of the pine than its own kind, it stands to reason that the conditions have been too severe for the reproduction of the pine. It is also an indication that other species are more virile than the pine. Is there in nature any reason for this? If the theory of a natural progression from the lower to the higher forms in the organic world is to be maintained, there is ample reason for these peculiarities of rotation or succession of species.

According to Gray, the pines are the oldest representatives of our forest flora. The giant sequoia is a lone survivor of a great, and at one time, numerous group of plants.

The ginkgo, a native of the Orient, is at present reduced to the stand of a monotypic species. Formerly it undoubtedly had many co-ordinates. The sequoia, the ginkgo and the pines all belong to the same general group or family, the conifers. It is known that there are among this family representatives of once prosperous genera. What does this mean? Simply this: That the great order conifers is slowly and gradually losing ground in the natural competition for supremacy. They are, in other words, less virile than their competitors. More congenial conditions for growth and development must be provided for them than for other species with which they now have to contend. Then, again, if we examine the structure of the floral or reproductive apparatus of the pine, we find it less highly developed than the same organs in their more successful rivals. This indicates that the pine is less highly organized than other trees. The more highly a plant or animal is organized, or the more complex its differentiation, the more capable it becomes of adapting itself to slightly changed conditions. The low position in the scale occupied by the pine to an extent explains why it does not reproduce itself. In fact, this, to my mind, is the keynote to the whole situation; for all necessary adaptive

variations are limited by the station occupied by the plant.

If what has been stated is true, and the white pine requires extra care in order to induce it to perpetuate itself, then it is our business as lumbermen or foresters to study these conditions and plan to conduct our operations so as to maintain the soil and atmospheric conditions suited to the growth of this most valuable forest tree. Substitutions are constantly being made, but for some purposes the white pine is greatly preferred to other woods; therefore it will always be in demand.

GASOLINE is the latest remedy for insects: It is applied with a brush. Take any convenient dish or pot and fill two-thirds with water and the balance with gasoline. The water will retard evaporation and assist in spreading the gasoline to every infected portion when applied. Most kinds of scale are killed effectually with one application.

THE California Fruit-Grower says: "Raisins growers of Fresno county are threatened with serious damage to their crops by the presence at this time of unusual numbers of thrips, or hoppers, in their vineyards. The insects come suddenly from—heaven alone knows where, and frequently, as suddenly disappear. The spray that will kill the thrip without killing the vine remains to be discovered. Screens and tanglefoot afford but a partial relief, and in view of the immense numbers in this particular visitation are totally inadequate as a correction of the evil. Turning sheep into the vineyards is effective only in part and affords no complete solution to the puzzling problem. Thorough and deep winter plowing and the destruction by fire of leaves, loose sticks and other vineyard rubbish appear so far to be the most efficacious methods of prevention, but the low price for raisins for years past has not been conducive to expensive cultivation and care—hence the plague of thrips."

HOT FLASHES.

General Derangement and Nervousness Preluded by Stomach Trouble.

Blood Disorder and Nervousness of Years Standing.

From the Commercial, Mattoon, Ill.

Mrs. Christiana Foster is a matron of Mattoon, who has recently been restored to the ranks of health after many years of suffering. She gave her statement to a reporter in such concise shape that we print it:

"My name is Christiana Foster, I am fifty years of age and a housekeeper. I have lived in Illinois ever since I was twelve years old. During the latter years of my life I have been much afflicted with stomach trouble, blood disorders and nervousness, and these were greatly aggravated about two years ago, when I became subject to most disagreeable hot flashes, (or perhaps I should say 'flushes')."

"I seemed to be losing ground all the time. I could not sleep but for a short time, not being able to obtain any appropriate rest, and I may say I was truly wretched."

"About one year ago, after reading an advertisement of Dr. Williams' Pink Pills for Pale People, I determined to get some of them, and did so, beginning to take them strictly according to directions. I had not taken half a box before I experienced relief, and before I had taken four boxes, I was, I may say, well. Of course I am growing old,

but that did not account for the bad condition I was in, my blood did not circulate, and if I pricked my finger while sewing, no blood followed the puncture. All this is different now, thanks to Dr. Williams' Pink Pills."

(Signed) "MRS. CHRISTIANA FOSTER."

Witness: MRS. ED. HEARN.

Dr. Williams' Pink Pills are not looked upon as a patent medicine, but rather as a prescription. An analysis of their properties shows that they contain, in condensed form, all the elements necessary to give new life and richness to the blood and restore shattered nerves. They are an unfailing specific for such diseases as locomotor ataxia, partial paralysis, St. Vitus' dance, sciatica, neuralgia, rheumatism, nervous headache, the after effects of la-grippe, palpitation of the heart, pale and sallow complexions, and the tired feeling resulting from nervous prostration, all diseases resulting from vitiated humors in the blood, such as scrofula, chronic erysipelas, etc. They are also a specific for troubles peculiar to females, such as suppressions, irregularities and all forms of weakness. They build up the blood, and restore the glow of health to pale and sallow cheeks. They are for sale by all druggists, or may be had by mail from Dr. Williams' Medicine Company, Schenectady, N. Y., for 50c. per box, or six boxes for \$2.50.

SEEDS.

Write for prices on any seeds wanted, FARM and GARDEN. Hungarian, Millet, Silver-Hull Buckwheat, Alfalfa and Crimson Clover, Ensilage, Stowell and Sweet Fodder Corn. Dwarf Essex Rape. 7½c. per lb.; 100-lb. lots 6½c. per lb.

S. M. ISBELL & CO.,
126, 127 and 129 Pearl St. W., Jackson, Mich.

SUMMER FORAGE SEED.

Common, Golden and Russian Millet, Hungarian, Field Peas, Buckwheat, Crimson Clover, Dwarf Essex Rape, Hairy Vetches, Cow Peas, Sorghum, Kaffir and Ensilage Corn. Little Giant Seeders, Clipper Grain and Seed Cleaners, Bicycles, Binder Twine, Spray Pumps. Be friendly and write us your wants.

THE HENRY PHILLIPS SEED & IMPLEMENT CO.,
115 & 117 St. Clair St., Toledo, Ohio.

SEEDS FOR PLANTING

Clover, Timothy, Hungarian, Millet and all kinds of farm seeds. Seed corn, fodder and Kaffir corn, cane seed, field and cow peas. If your dealer does not handle our seeds, write us for prices.

JOHNSON & SON, Seed Merchants, Goshen, Ind.

"Strawberry Plants That Grow."

Standard sorts, \$1.50 to \$2.50 per M. Best Rasp. and Blackberry plants, \$3.50 to \$5.00 per M. My "1897" catalogue mailed free.

C. E. WHITTEN'S NURSERY, Bridgman, Mich.

CELERY PLANTS. Produced by the oldest and the business. Best plants. Lowest prices. Prompt delivery in good order. Following varieties: White Plume, Giant Pascal, Giant Golden Heart, Pink Plume and Golden Self Blanching. Address for prices and other information, THE PRAIRIE SIDE CUL-ERY CO., Drawer M., Tecumseh, Mich.

THE PUMP THAT PUMPS Pumps
Force, Tank Lift, Spray, and all kinds of
YERS Hay Tools
F. E. MYERS & BRO.,
Ashland, Ohio.

SPRAY with the EMPIRE KING
of HARFELD KNAPSACK
FERTILIZERS. No spraying
styles of Spray Pumps. Catalogue Free.
FIELD FORCE PUMP CO., 24 Market St., Lockport, N. Y.

Mention Michigan Farmer when writing advertisers.

Farmers' Clubs.

CONDUCTED BY A. C. BIRD.

All correspondence for this department should be addressed to A. C. Bird, Highland, Mich.

OFFICERS OF THE STATE ASSOCIATION OF FARMERS' CLUBS.

PRESIDENT—J. T. Daniels, Union Home.
VICE-PRESIDENT—Patrick Hankard, Henrietta.
SECRETARY—Treas.—F. D. Wells, Rochester.
DIRECTORS—G. L. Hoyt, Saline; L. H. Ives, Mason;
W. H. Howlett, Dansville; C. J. Phelps, Damon;
F. M. Whelan, North Newburg; A. L. Landon, Springport.
All communications relating to the organization of new Clubs should be addressed to F. D. Wells, Rochester, Mich.

AN ANNOUNCEMENT.

All contributions to this department, club reports or otherwise, must reach the editor not later than Saturday night each week in order to insure their appearance in the next week's issue of the FARMER. All matter for this department should be sent directly to the editor at Highland, Mich. When such matter is sent to the Detroit office it is invariably forwarded to us before using and an unnecessary delay and expense is caused.

THE MICHIGAN FARMER AND STATE TAXATION.

The legislature has adjourned and the tax rate for the next two years is practically fixed so far as the State tax is concerned. It is a subject of especial congratulation to the taxpayers of the State that this rate will be decidedly less than that of the preceding two years. Practically three-quarters of a million of dollars have been saved by the exercise of simple business economy in the matter of appropriations and other legislation affecting public receipts and expenditures. This has been accomplished without seriously crippling any State institution, without in any way interfering with the proper administration of the public affairs of the State, and without imposing any unjust burdens upon the corporations whose taxes have been increased by recent legislative action.

The primal force instrumental in bringing about these improved conditions in public affairs and the consequent saving in taxation, is everywhere recognized to be the farmers' organizations of the State. No well informed person longer disputes the fact that the organized effort of practical men, farmers or otherwise, can, and does, influence legislation to a very appreciable extent.

But through what means has this great influence been effectively concentrated? For years it has been recognized as axiomatic that the farmers of this State could bring about these results if they would only unite in their demands and concentrate their efforts. This unity of action has at last been secured. And, although to the farmers' organizations of the State belongs the credit of having done the work, yet without the MICHIGAN FARMER as a medium through which the work could be made effective, without the MICHIGAN FARMER to concentrate and unite public opinion along well defined channels, without the MICHIGAN FARMER as a medium through which the case of the people could be regularly and effectively each week presented to the legislature, this great work could never have been accomplished.

The intense interest of the publishers of this paper in the work of the Farmers' Clubs and Granges along these lines was emphatically made manifest by their action in voluntarily and freely issuing the order that a copy of the paper be placed upon the desk of every member of the legislature each week of the legislative session. In the carrying out of that order the demands of the farmers of Michigan have been made known to every senator and to every representative in the legislature, be he farmer, lawyer, merchant or mechanic. In no other manner could any considerable proportion of the members have been reached.

And the best of it all was the fact that the members read the copies of the paper placed on their desks. Visitors to the legislature on Monday nights and Tuesday mornings when the members had just arrived from their homes would see nearly every one of them with his copy of the MICHIGAN FARMER open before him reading the Farmers' Club and Grange Departments; reading the reports from the local clubs and granges in his respective district. And it was no uncommon thing in the debates upon the various measures for the

members participating to cite extracts from some editorial or report in these departments in substantiation of their arguments.

No other State paper was doing such a work. No other State paper was regularly bringing messages directly from the taxpayers to their representatives, and the members of the legislature early recognized this fact. The MICHIGAN FARMER by this action enabled the farmers of Michigan to save themselves in taxation for the next two years more dollars than they have paid for subscriptions to the paper during all the years of its existence. No other State paper was in position to do this great work even had it been attempted.

The farmers of Michigan, the business men of Michigan and every taxpayer of Michigan depended upon the MICHIGAN FARMER to present their case before the legislature week after week, and that this confidence was not misplaced will be demonstrated in a most practical manner when the tax collector next makes his rounds.

THE ASSOCIATION TOPIC FOR JULY AND AUGUST.

As previously announced, the Association topic for July and August will be "The Agricultural College." It was the purpose of the committee in suggesting this topic to institute a discussion which would present the work of the College fairly and accurately to the people of the State, and which would result in acquainting the farmers of Michigan more thoroughly with the work of the educational institution which is peculiarly their own.

In accordance with this idea we are especially gratified at being able to announce that during the succeeding weeks we shall present to our readers a series of articles upon the topic, written by some of the most able men in the State. These contributors will invariably be men who are thoroughly acquainted with the College and its work; farmers whose sons have taken the course of study there, farmer graduates from the institution, practical fruit growers, dairymen, and the professors at the College under whose immediate supervision the work is carried on. Every contributor on the list will be one in whom the farmers of the State have the utmost confidence.

As a fitting prelude to this series we publish this week an eminently practical article on "Why Boys Leave the Farm," by Dr. R. C. Kedzie, who for over a quarter of a century has stood foremost among the agricultural chemists of the country, and who has done more than any other living man for the advancement of Michigan agriculture and the upbuilding of the institution with which he has so long been connected. A further article on the direct work of the College is promised by the same author and will appear in this department in an early issue.

THE GROWTH OF THE ASSOCIATION.

The season of greatest activity among the clubs is about over. During the summer many clubs do not meet, while among those that do the members find their time so occupied by other matters that club work usually languishes till fall. For these reasons the present gives us a good opportunity to look over the past and see what the growth of the club movement has been.

The Farmers' Club is no new thing. In the older states there are such organizations which have been in existence since before the war, but there are not many of them and they have been of local importance only. In Michigan the oldest club reported to us was organized in 1872. If there are others that have been running a longer time we shall be pleased to hear from them. But by far the greater number have been organized during the last ten years, while nearly half of those belonging to the State Association have come into existence since 1892.

But the State Association is comparatively new, being not yet four years old. It is not only the first state organization, but it is still the only one which may be said to have passed the experimental stage. The clubs in Ohio, California and Indiana have recently taken steps in this direction, but the results are still uncertain. In our own State, however, there is no longer any question as to the value of a central organization. The rapid growth in the number and influence of the clubs has proven conclusively that the Association was needed. The work now being successfully carried out could not have been attempted by isolated clubs, no matter how numerous.

The Association has been strong from the first, yet its growth has been beyond expectations. At the first meeting, held at Lansing, February 1, 1894, there were 31 delegates, representing 22 clubs. The last meeting, held in December, 1896, had an attendance exceeding 100 from 53 clubs. All

this had been done in less than three years. At the present time there are 84 clubs on the Association's list, besides several who have not yet registered, the whole number who may be considered as members being nearly or quite 100. Of these, 19 have joined the Association since the last annual meeting. Several more have given assurance of their intention to do so before the close of the year. From this the strength of the Association by next fall may be safely estimated at 100 clubs, which should certainly be a satisfactory showing for the four years' work of the state organization.

But although the past year has been a prosperous one for the club movement, yet this is not a time to cease from activity in its behalf. There are still many clubs not in the Association that ought to be, and many localities in which clubs might be organized. This is a work which must be done largely by the individual clubs, as there are no regular organizers employed by the Association. A little attention to this on the part of every club during the summer ought to result in a large addition to our numbers by next winter.

FRANK D. WELLS,
Sec'y State Association.

WHY DO BOYS LEAVE THE FARM?

DR. R. C. KEDZIE, PROFESSOR OF CHEMISTRY,
MICHIGAN AGRICULTURAL COLLEGE.

For many reasons—too many even to read by title in a short paper. Passing by a large number, and those usually selected as explaining the exodus, I take up the one that led me to turn my back upon the farm, for I was in early life a boy-deserter from the farm, and in this open court I plead guilty to the charge and offer my defense, if not justification, for desertion in the face of my friends.

My childhood home was on a beautiful and fertile farm on the banks of River Raisin in southern Michigan. We settled five miles into the woods, and it was ten years to get out! It was pioneering life of most pronounced type. My father died in less than two years after our settlement, and my widowed mother with a family of seven, the eldest less than sixteen years old, was left to grapple with the wilderness of nature. Twenty-five miles from mill, shop, store and civilization; a mail once a week on pony-back; a circuit preacher once in a month or two—this wild western life seemed to have lost the flavor of paradise.

You are ready to exclaim, no wonder you would flee from the wildwood tangle of such pioneering life! There you mistake. There was much to excite curiosity and awaken thought; new trees to know with bark of curious taste; new fruits that might be fit for food; new nuts to store for winter; new snakes to find and kill; wild game to capture and utilize, and new types of humanity in the native Indians whose style of life was a constant study and whose guttural speech it was a delight to learn. The world was new, fresh, untrodden, and life was full of inspiration. The changes of the seasons were carefully noted and every uncommon phenomenon had its own significance. When packs of wolves howled in full chorus in late autumn it was "good-bye to the year," and we confidently said, "winter has set in."

When spring came and the river broke its icy chains with thundering sound and the grinding, tumbling, splintering, masses of ice went out with the spring flood, it filled us with awe, but yet a secret joy. We were in touch with nature in her varying moods and life had "the glory freshness of a dream." "A change came o'er the spirit of my dreams," the trees were cut away from the banks of the Raisin and no longer shaded the ice and kept it for a grandstand display; the ice slowly rotted in its river bed and quietly crept away as if ashamed of its former glory, the Indian with the game retreated into deeper forests, the wolves forgot to howl in the winter, the wild fruits and nests were known, the trees were cut down and burned up, and the fields laid bare—Oh, so bare! The freshness and glory of life had departed. "At length the man perceives it die away and fade into the light of common day." We could plant, hoe and husk our corn; sow, reap and flail our wheat; plant, dig and bury our potatoes, milk the cows and feed the pigs—all this with dreary repetition, year in and year out, changeless, plodding drudgery, without a new thought or an inspiration or aspiration. A spelling school or singing school at wide intervals of time would stir the stagnant pool of our thoughts only to show us how stagnant it was. It was then that I came to hate the farm. Life on the farm seemed to me a ceaseless round of toil, year after year of unbroken work with a tiresome sameness, without thought or interest or variety except to exchange one form of drudgery for another. I wondered why men would continue such joyless toil? what they hoped for as the outcome of all this work? The patient ox in the furrow seemed a natural part of this system of life, and to have as much pleasure as his yoke fellows who ran the farm!

The thought of such a life that should be all of life was to my mind revolting, and I vowed I would not live on the farm. What was the cause of this revolt? It was because toil was divorced from thought, and work without thought is drudgery, work mingled with thought is joy. Take the astronomer as he lies on his back night after night in his observatory, wrapped in blankets to keep out the piercing cold, with his eye glued to his telescope that pierces the sky and brings him in touch with "thoughts

that wander through eternity"—is there no fatigue and weariness in all this? Yet he is filled with joy that words cannot measure. Take the chemist in his noisome laboratory, as with the probe of experiment he explores the secrets of nature, but do not hope to draw him away with the cup of pleasure. Take any man who, in a large measure combines toil with thought and you will find the joyous man. All other concerns of life are of small account to him. "I have no time to make money," said Michael Faraday while making discoveries that have enriched the race. "I cannot leave my work to accumulate wealth," said Louis Agassiz. Yet to make money is honorable, and to accumulate property is commendable. The world would be poor indeed without this. When the farm boy by the sense of ownership comes to feel that he is acquiring power for future use, the weariness of work is lightened. But if he can associate toil itself with thought—if the soil he turns becomes instinct with thought through its history and changes as revealed by geology; the plants he cultivates and the weeds he destroys have a message for him through botany; the insects he meets have a lesson of help or hindrance through entomology, and the clouds floating aloft and the winds that fan his brow have a lesson of assurance or warning through meteorology—these agencies of thought become the unseen ministers of companionship and comfort to sweeten toil. The boy with such ministrations will not lightly turn from the farm. This is the reason why the farmer's boy has the right to a full knowledge of all the sciences that come into play on the farm. His classics are around him in daily life, and the volume of nature is open before his discerning eye.

REPORTS FROM LOCAL CLUBS.

SALEM AND WEBSTER FARMERS' CLUBS JOINT MEETING.

The gathering on June 2d at the residence of Isaac Savery, of Salem, was apparently composed of a people of a truly scriptural social nature.

A commendable familiarity with the principles taught in the sermon on the Mount exhibited itself in their deportment toward their guests, the twenty or more representatives of the Webster Farmers' Club.

From fifteen to twenty miles were covered by the Websterites that they might have a social and intellectual feast with the Salem Farmers' Club. Not one seemed to regret the long ride as the feast was beyond expectation, and the Salemites forgot not that their guests were fond of that which nourishes the physical man.

This was the largest assembly of farmers ever attended by your scribe at a private house. "A feast of reason and flow of soul" was well exemplified.

Rev. Hanford opened the literary exercises with an exceedingly well given address on "Taxation." The evil tendencies of the lobbyist, the selfishness of corporations, and the incompetency of many of our officials with their inclination to selfishness were portrayed in a straightforward manly way, not forgetting to give credit where credit was due. In his remarks, and also in most of those who followed, the pessimistic tone was avoided.

It remained only for one to virtually act the part of a pessimist, and this was done under the guise of an optimist by berating the preceding speakers for their fault-finding disposition, thereby proving himself the biggest pessimist in the whole crowd of over 125 people.

This gentleman was one of the guests and was quite fluent of speech, and an entertaining speaker, and added much to the enjoyment of the occasion notwithstanding he forgot the "beam in his own eye."

Governor Pingree was complimented by many, yet he was rather harshly alluded to by the guest who seemed so exceedingly well satisfied with the present condition of affairs throughout our country, "patting himself on the back" with a hand that could write a check that would be honored for a large sum of money. In fact one would hardly believe from the countenances of the assembly or from their dress and equipments, that the country was being disturbed by great financial reverses.

The uniform school book law received words of commendation, as did also the disposition of our State house of representatives. The State senate was emphatically denounced.

The closing scenes of the legislature as exhibited in the house were not referred to.

R. C. REEM,

Cor. Sec. of Webster Farmers' Club.

MAPLE RIVER FARMERS' CLUB.

Club met Thursday, May 27th, at the home of Mr. and Mrs. Geo. E. Martin. Over a hundred members and friends were present. After the usual preliminary exercises, the club took up the regular afternoon program.

Association question, "How can we best improve our roads under the present system?" was presented by Mr. C. H. H. Payne. Mr. Payne expressed himself as being in favor of better roads, but his ideas are not in harmony with the "good roads movement" as at present advocated. He believes what we do we should do well, but should not try to do too much. He believes in a fair width of road, and where practical, hills should be reduced to an easy grade.

"Culture and outlook for the bean crop," presented by Mr. Wm. Scranton. Mr. Scranton said in part: Plow early and fit well; plant from the 10th to the 15th of June, using about one-half bushel seed to the acre; don't cultivate when damp; when harvesting plow three rows into one and if

wet turn often and they will not damage. Mr. Seranton believes overproduction is the cause of low prices.

"Borrowing, lending and exchanging work" by Mr. C. E. Fuller. Mr. Fuller thinks that borrowing and lending shows a neighborly feeling, but things borrowed should be returned promptly and in good repair; we should not be willing to ride a willing mule to death. Mr. Fuller does not believe changing work is desirable under ordinary circumstances, yet we should always be willing to accommodate one another.

The above leading topics were well inter-strewn with other interesting papers, besides music and recitations. After adjourning, the guests betook themselves to the dining room and later homeward to meet June 24th with Mr. and Mrs. Ransom Fuller.

ARBUTUS FARMERS' CLUB.

The May meeting of the Arbutus Farmers' Club was held at the pleasant home of Mr. and Mrs. Thos. Cook, of Union Corners, on May 22. The meeting was called to order by President Hickey.

In the absence of Mr. Bowman, Mr. A. Merritt led the discussion of the club question, "What is the best variety of corn to raise in this vicinity?" It was the general opinion of those present that the small eight-rowed yellow corn was best adapted to this vicinity.

The discussion branched off to the best method to secure a good corn crop. Mr. Merritt favored putting hen manure and ashes on the hills.

It was decided to let the ladies have charge of the next meeting and the discussion of their question, "General housekeeping," to be led by Mrs. Priestley.

It was also decided that the gentlemen be the workers at the next meeting, which will be held at the home of Mr. and Mrs. Woodrow, the fourth Saturday in June.

The meeting was not as largely attended as usual, the farmers being busy planting corn.

SOUTH JACKSON FARMERS' CLUB.

One of the most successful meetings of the season was held at the pleasant home of Mr. and Mrs. John Cain at Cedar Bank, May 29th. The weather department obligingly sandwiched in a perfect day between a couple of left-overs from the January stock, and the attendance was large and enthusiastic. The reporter, much to her regret, was unable to be present until the afternoon session, and so can report that only.

After the usual bountiful dinner President Hammond called the meeting to order and the report of the viewing committee was read and accepted. The farm contains eighty acres and produced last year 257 bushels of wheat, 1,000 bushels of corn, 80 bushels of rye, 75 bushels of potatoes and 2,750 pounds of pork. The buildings fences and tools are all in excellent condition, the house convenient, and flattering mention was made of Mrs. Cain's success in poultry raising.

President Hammond announced an invitation to the county club meeting on the Jackson fair grounds, June 1st, and then Mr. John Neely was given the floor and allowed to open the topic for discussion: "Would it be advisable to grant the request of the supervisors and vote them \$15,000 to build a new court room?" Mr. Neely is rather a humorist and his audience smiled audibly as he set forth his views. He expressed himself in favor of repairing the old court house, but thought it likely that Jackson would get a new one. He would rather be taxed for \$15,000 than for \$80,000.

Mr. Robert Tygh has personally examined the building and is convinced that it is necessary to do something. It is as necessary to have a good court house as for a farmer to have a good home, and the farmers should look at it in that light, decide what they want and vote accordingly. He is willing to let the majority decide.

Messrs. Wm. Hutchins and John Ramsdell said they should vote against the appropriation, and Messrs. Goldsmith and Strong say they prefer a new court house, but are not willing it should cost an extravagant sum.

Mr. Ford read the report of the building inspectors condemning the present court house and thinks it only just that since we voted down the appropriation for a new building, to grant this \$15,000, for we must do something. The trouble is they are so smart in Jackson that we must either give them all they ask or give them nothing.

Dr. Fallas called attention to the nine-dollar inspection fee tacked to that report, and Mr. Howe criticised the policy of having a board of inspectors, thinking each city capable of inspecting its own defective buildings and also thinking it much easier for that board to earn nine dollars than for the farmers to earn the money to pay the bill.

Mr. Jones, of Chicago, a visitor, was called upon and advised the club to vote down the appropriation of \$15,000. It seems a good deal for mere patching, and a patched-up building never amounts to much, anyhow. Moreover, it would not settle the question. It might for a year or two, but in the end Jackson would have a new court house and the \$15,000 besides. The board of supervisors can, by their own vote, raise \$10,000 and surely that is enough to expend solely for repairs. If we vote down this appropriation we will be \$5,000 ahead, anyway, and will find it the cheapest in the end.

Dr. Fallas sustained Mr. Jones' views, and a discussion regarding a site arose. No one seemed in love with the present location. President Hammond wants a new court house, and wants it placed in the center of a block away from the noise of traffic. The club seemed rather to like the idea of the park site and would like to be informed if that can be secured, as it un-

derstands that the park was deeded to the city in trust to be used as a park.

Mrs. Milton Reed read an excellent paper upon "Which has the greater influence upon a man's moral character, the mother's teachings, the father's example, or the force of heredity?" She did not attempt all sides of the question, but took the ground that "the hand that rocks the cradle is the hand that rules the world," and evidently thinks a mother's influence strong enough to overcome a father's bad example, evil hereditary tendencies and everything else. Mrs. Fallas, Mrs. Kipp and others each said a word for the mother's influence, and some silent ladies looked very thoughtful. Mrs. Ford was observed to be getting nervous, and when called upon said she had been waiting for someone to mention the father's influence, but feared from the tenor of remarks that he hadn't any. (Laughter and applause.) The thoughtful ladies looked relieved. They smiled upon Mr. Strong when he spoke for "pa," but it was left to Mr. Tygh to "bring down the house." He, too, is a humorist and his remarks upon the exceptions to the laws of heredity were greeted with shouts of laughter. President Hammond, his face wreathed in smiles, pounded away in vain for order, and Mr. Tygh finished his remarks amid vociferous applause. Others took up the discussion and many good things were said.

The June meeting will be held with Mr. and Mrs. C. H. Goldsmith, and the question for discussion will be "Is a monarchical form of government preferable to a republican form of government?" to be opened by S. A. Strong. C. H. Goldsmith will talk upon current events.

HELEN M. CARPENTER, Reporter.

RAISINVILLE AND IDA FARMERS' CLUB.

The Raisinville and Ida Farmers' Club met May 28th, at the home of Mr. and Mrs. Geo. Youngloves. Though a busy season there was a large attendance.

The question, "Is it for the best interests of the people for the government to own its own railroads?" was opened for discussion by J. W. Morris. He was not in favor of government ownership. The question was discussed pro and con for considerable time, some thinking that the government could run the railroads as well as the post-offices, although the postal service did not pay expenses. Others were of the opinion that the government had enough to attend to now.

The next question, "How can the roads be made better under the present system?" was opened by John Nichols. He thought it best to grade high in the center and have the sides well drained. There was some discussion on macadamized roads and their cost. Mr. Justus Sortor thought macadamized roads would cost more than electric cars, and that it would not be long before we would have transportation by electricity through the country. Then the macadamized roads would be of little use.

The question on "Economy" was opened by Mrs. John Nichols. The ladies seemed to think more of economy of labor than of money.

The club was furnished music by the Scofield singing club, which was heartily appreciated by those present.

The next club meeting is to be at Nelson Davis', June 25th. Subject, "To what extent should a farmer be a politician?" Leader, G. Langdon.

MERTIE W. KRING, Cor. Sec.

NORVELL FARMERS' CLUB.

An unusually fine company assembled with L. D. Watkins and wife, at Fairview, on May 29. Regrets of inability to be present were read from Robt. Gibbons and A. C. Bird, of the MICHIGAN FARMER.

The essay by Mrs. R. D. Palmer on "The sunny side of farm life," asserted that there is such a side, and it were well if we viewed it more than we do.

Mrs. F. J. Randall thought the proportion of sunshine and shadow lay in our own hearts.

Mrs. E. W. Crafts, of Grass Lake, said we ought not to be ashamed to be shabby when we must be. Many lives are beclouded because of longing for something that is out of reach.

The program was made up of several topics given out at the time for impromptu remarks.

The model answer to "What constitutes a good citizen," was given by L. Whitney Watkins. First, obey the laws of God; then obey the laws of the land, every law so long as it is a law; then be filled with good will toward men.

As to what line of farming promises most profit at the present time, A. Hitchcock would say stock-feeding and wheat, cattle, corn and wheat, while S. W. Homes and R. Green would pursue mixed farming—grow a little of everything.

John Green said the farmer who is constantly dodging about to produce that which is highest in price, always sells low-priced products.

Geo. S. Rawson spoke of the work of the legislature. Every member when elected is ambitious to have his name connected with some important measure, so bills are introduced in great numbers, many of them with no expectation that they will ever become laws. As to bills introduced, he would have been glad to have seen the Kimball bill and the bill forbidding the killing of quail become laws. The exemption of mortgages from taxation is wrong in principle, and if their legal collection was made to depend upon their being listed with the supervisor for taxation, there would be no difficulty in finding them. There is evidently something still imperfect in our highway laws when road districts can pass a year or more without doing a day's work or paying a cent of tax, as is not unfrequently the case.

H. Woodward has not been favorably impressed with the present legislature, and is

glad that they have finished their work. In reply to a question by T. B. Halladay, he did not think the free passes given by the railroads influenced the vote of the members. S. W. Holmes said the passes extended the length of the session. They make it so convenient for the members to waste time by going home.

M. L. Raymond asked why railroads are taxed on a different principle from farmers. If we paid taxes on our gross receipts it would change things materially with many of us. Our legislators manifest a tendency to take power out of the hands of the people, especially in school and highway matters.

The last topic considered was "The farmer's education; in what shall it consist and where shall he get it?" E. W. Crafts believes that if any class should be well educated it is the American farmer. Get a good common school training, then go to the Agricultural College, where the courses of study are all planned to help the farmer.

L. D. Watkins said the farmer's education is never finished. Would advise cultivating any branch for which there is a natural aptitude, becoming a specialist in a word, as more pleasure will be so gained than from a more general training.

H. R. Palmer asked whether or not it were wise to specially cultivate those faculties that are weakest, to educate in opposition to the natural tastes? F. J. Randall said no, but some doubted.

A. R. PALMER, Sec.

WALLED LAKE FARMERS' CLUB.

The Walled Lake Farmers' Club met Tuesday, June 1st with Mr. Chas. Ranous. Notwithstanding our great disappointment at not having Mr. Gibbons of the MICHIGAN FARMER with us, we still had a very enjoyable meeting. Mr. Bell and his little daughter Mary added to the entertainment with a select reading and two recitations.

T. C. Severance Jr., in a paper upon "The United States Department of Agriculture," traced the development of the Department from its origin to its present condition and then gave an outline of its present work. In 1794 the Philadelphia Society appointed a committee to make plans for a State society. They aimed to give education in agriculture, first, through the university and colleges, and second, through the common schools. Each school district was to be a center for the collection and diffusion of information upon this subject. The schoolmaster was to act as secretary of the society. In 1839 Congress appropriated one thousand dollars for the promotion of agriculture. This sum has increased to over two million dollars yearly. This enormous sum is for our benefit and we should keep in as close touch as possible with the Department in order that we may receive as much benefit as we can. We should especially keep watch of the publications of the Department and secure and make use of all bulletins that bear upon our line of work.

In opening the regular question, Mr. J. Law said that our clubs are being stimulated by our department in the MICHIGAN FARMER to an increased interest in legislation.

Mr. C. Ranous said that the chief element of success in our clubs is the meeting together. We learn to know each other better and there is a more friendly feeling in the community. It educates the young.

Mr. R. S. Howard says the clubs are especially valuable for the recreation they furnish.

Our question box brought out several points of interest.

Mr. McKinney holds that our farmers' organizations fail because we do not push them vigorously enough. We are afraid to put money into them.

Mr. Nicholson said that our present system of road making is good enough if we will only do honest work on the road.

Mr. Law holds that we can get money honestly by being honest. Have our produce just as we represent it when we take it to market. It was held that seeding will catch nicely after buckwheat.

HOWARD SEVERANCE, Cor. Sec.

HAMLIN FARMERS' CLUB.

At our meeting at C. H. Welden's we enjoyed a feast of intellectual food in a paper presented by Mr. D. Pierce, who presented the subject of "How to best improve the roads under the present system." Roads of the present are the results of the labor of the past. The maker of the roads should be improved so that he will look after the needs and qualify himself for the position. Mr. Pierce recommended the road machine to be followed by a spike-tooth drag for the purpose of leveling and pulverizing the soil. Gather the sod and stone to some low place to act as filling. Mr. Pierce recommended less frequent changes in the road officials.

Recommendations from those who participated in the discussion:

Do work in sections so as to establish the section, the next year another section, and so on.

That the law be changed so as to call the taxpayers to work the roads the first part of April.

That the roadmaster be retained in office for at least five years.

One member who did road work in 1833 in Michigan bore testimony to a vast improvement in the roads of to-day.

The June meeting with us is called the "Strawberry meeting" and will meet at C. M. Hunt's the 23rd day. Program: State question by Mr. Freeman. Discussion led by F. Osborn. "Lights and shadows in every day life" by Mrs. Ross Lamb. Discussion led by Mrs. Elsie Wentworth. Recitation by Alice Wheeler. Select Reading by Mrs. J. Holmes. M. A. JACOBS, Cor. Sec'y.

EMERSON FARMERS' CLUB.

The Emerson Farmers' Club met at the home of Mr. and Mrs. Helm on May 13th. The queries and answers were as follows:

Are any of the members troubled with mold on their fruit this spring and how can it be remedied? Ans. 1st, By wrapping in papers and keeping in a cool, dry place. 2d, By putting a paper that has been dipped in alcohol over the top. 3d, On jam it can be prevented by putting a layer of sugar over the top, or by putting a thin layer of melted suet over the top.

What is the best way to put out oats, to fall plow, to plow in the spring, or to cultivate and sow without plowing? Answered in favor of each method, some advocating one and some the others. It was urged in favor of the last that it was quicker and cheaper and that we must now try to use the cheapest methods if we would succeed.

The next meeting will be held at the home of Mr. and Mrs. R. C. Lake, June 10th. ALICE M. BROWN, Sec'y.

When writing to advertisers please mention that you saw their advertisement in the Michigan Farmer.

Strange New Shrub that Cures Kidney and Bladder Diseases, Rheumatism, etc., Free

We have previously described the new botanic discovery, Alkavis, which proves a specific cure for diseases caused by Uric acid in the blood, or disorder of the Kidneys or urinary organs. It is now stated that Alkavis is a product of the well-known Kava-Kava Shrub, and is a specific cure for these diseases just as quinine is for malaria. Hon. R. C. Wood, of Lowell, Ind., writes that in four weeks Alkavis cured him of Kidney and bladder diseases of ten years' standing, and Rev. Thomas M. Owen, of West Pawlet, Vt., gives similar testimony. Many ladies also testify to its wonderful curative powers in disorders peculiar to womanhood. The only importers of Alkavis so far are the Church Kidney Cure Co., No. 418 Fourth Avenue, New York, and they are so anxious to prove its value that for the sake of introduction they will send a free treatment of Alkavis prepaid by mail to every reader of THE MICHIGAN FARMER who is a sufferer from any form of Kidney or Bladder disorder, Bright's Disease, Rheumatism, Dropsy, Gravel, Pain in Back, Female Complaints, or other afflictions due to improper action of the Kidneys or Urinary Organs. We advise all sufferers to send their names and address to the company and receive the Alkavis free. It is sent to you entirely free, to prove its wonderful curative power.

The Safety Hand Separator.



There is all over the country a general interest in what is known as the Moody plan of using dairy separators in the creamery. Mr. Moody is putting in five hundred Sharples hand machines in connection with his factory. If you

want to know his plan send to us for circular fully describing it.

P. M. SHARPLES,
West Chester, Pa.
Eglin, Ill.
Rutland, Vt.

NO DIRT LEFT IN CLOTHES

Washed with the
ECLECTIC WASHER.

100 pieces per hour and no hard work; that's the record. Price, \$2.50. Agents Wanted. Exclusive sale. Write for terms.
EDWIN KNEELAND, Mfr. of Refrigerators and Washers, LANSING, MICH.

BICYCLES GIVEN AWAY FREE!

We are giving a strictly High Grade Wheel to persons selling Tea, Coffee, Spices, Baking Powder and Extracts. This is an opportunity for all to earn an \$85.00 Bicycle FREE. The goods are guaranteed absolutely the best obtainable. Address

LAPEL BROS.,
The Old Reliable Tea House, 17 Cadillac Square,
DETROIT, MICH.

AGENTS WANTED to solicit business for the State Mutual Cyclone Insurance Co. Only reliable parties who will devote a considerable part of their time to the business wanted. Apply with references to the Secretary, Lapeer, Mich.

A NEW ASTHMA REMEDY. The latest and best remedy for the relief and cure of Asthma that has ever been discovered. RELIEF in 5 minutes, and a PERMANENT CURE. Sample sent for a two-cent stamp. **JONES & MILLER, Sandusky, Ohio.**

FARMS. Do you wish to buy or sell one? I have a number of farms taken on mortgages that I will sell cheap and on easy terms at 6 per cent. As I have a large enquiry from various sections, I am also on the look out for farms that can be bought cheap. Send for printed list. E. W. ABBOTT, 10 Wainwright Opera Block, Detroit Mich.

MUST HAVE AGENTS AT ONCE to sell Sash Locks and Door Holders. Sample Sash Lock free for two-cent stamp. Immense; better than weights; burglar proof. \$10 a day. Write quick. Address **BROAD & CO., Box 111, Philadelphia, Pa.**

EARL D. BABST,
56 Moffat Building, - Detroit, Mich.

Attorney-at-Law
Practice in all courts; Collections made anywhere in U. S.; special attention to law of the farm. Attorney for Lawrence Pub. Co., also other references.

When writing to advertisers please mention the Michigan Farmer.

Veterinary Department.

CONDUCTED BY DR. W. C. FAIR.

Advice through this department is free to our subscribers. Each communication should state history and symptoms of the case fully; also name and address of the writer. The initials will only be given. When an answer is requested by mail it becomes private practice, and a fee of one dollar must accompany the letter.

COW HAS TWO OPENINGS IN TEAT.—Jersey heifer has two openings in teat. One hole is about one inch above the other and is very troublesome in milking. She will be fresh in September. How can I close upper hole and when is the best time to do so? G. G. F., W. Branch, Mich.—Scarf the edges of the upper opening and make them raw. Then stitch wound up closely with a fine catgut and it will soon heal.

INJURED UDDER.—Cow will come in about the first of September. She gives a good mess of milk, but by spells the milk is mixed with a little blood. The cow is eight years old. What had I better do for her? I. P., Lansing, Mich.—Try to ascertain how your cow injured her udder, and remove the cause and she will be all right. Bloody milk is the result of an injury often rather than it is the result of disease.

HORSE PAWS IN STABLE.—I want to know if there is any way to prevent a horse from pawing and striking his knees against the manger, while standing in the stable. G. W. D., Hazelton, Mich.—Remove the manger and buckle a strap around his pastern with a piece of chain about 18 inches long. Should that fail, hopple his forelegs together about 14 inches apart. What would be better still would be to keep him in a box stall.

MALIGNANT SORE.—Valuable work mare, six years old, has sore on her leg directly in front of the hock joint. Wound discharges a little. She strained her leg one year ago and I blistered it two or three times. I tried to heal it but have not made much headway. There is some enlargement. T. A., Ebart, Mich.—Apply iodoform twice a day. Do not wash wound with dirty water, but use a weak solution of carbolic acid and water before using the iodoform.

COUGH.—I bought a six-year-old mare some time ago. She was represented to be sound in every particular. Every time that she drinks cold water she coughs once or twice and occasionally chokes a little. Glands are enlarged. She is in good condition and does her work very well. What can I do to relieve her cough and reduce the glands? S. T., Atlas, Mich.—Give one dram fluid extract wild cherry and one-half ounce fluid extract licorice in four ounces cold water twice a day. Apply tincture of iodine to enlarged glands once a day.

INFLUENZA.—Three-year-old colt lost his appetite some two months ago; had some fever at the time, which gradually subsided. His limbs swelled somewhat, one after the other, and now he is stiff in all four legs. His muscles are sore to the touch. I feed him six quarts of oats daily, divided into three feeds, and timothy hay. He eats very little hay. What is the difficulty and how should he be treated? D. W. Watrous, Mich.—Give one dram ground nux vomica, one dram powdered colchicum, one dram powdered nitrate of potash in his feed three times a day. Turn him out to pasture.

COW GIVES BLOODY MILK.—What is the cause of a perfectly healthy cow giving bloody milk? Is the milk fit for use if only slightly discolored? What treatment should the cow receive? T. J. S., Whitehall, Mich.—The most common cause is an injury of some kind to the udder. Cows lie down on hard substances, jump fences or logs, frequently causing bloody milk until the rupture of the blood vessel heals. The removing of the cause is the best cure. Furnish your cow with plenty of bedding, or a smooth piece of ground for her to lie on day times when she is not running out to pasture.

AZOTURIA.—Mare nine years old lost use of her hind quarters after being driven about four miles. She apparently recovered and I drove her home. She then stood in the barn two days and appeared all right. I drove her again and she had a recurrence of the attack. She had a similar attack three years ago. Have fed her six quarts of oats three times a day. Her urine is very dark in color. J. H. L., Williamston, Mich.—Your mare suffered from azoturia. The cause was high feeding and not sufficient exercise. A run to grass for a few days would be very beneficial. Give her two ounces Glauber's salts three times a day. Reduce her in flesh. In the future, exercise her daily. Keep her bowels open and acting freely and you will not be troubled with a recurrence of the trouble.

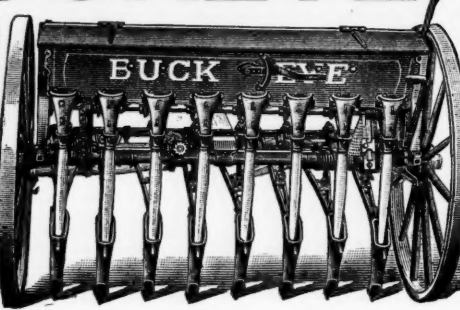
SAVIDGE'S SPAVIN CURE, Price 50 Cents.

Positively guaranteed to cure Spavin, Splints, Curb, Ringbone, Callosities, Galls, Swellings, Strains, Grease Heel, Thrush, Founder or any lameness; also removes enlargements. NEVER SCAMS or delects. We guarantee to refund the money if our remedy does not do all we claim. Can be ordered through druggists, or sent charges prepaid for 50 cents.

SAVIDGE & WARD, North Baltimore, Ohio.

BUCKEYE STEEL FRAME Combined Grain and Fertilizer Drill

Ten years of unqualified success have proven the superiority of our COMBINED GRAIN AND FERTILIZER DRILL. It sows all kinds of grain and all kinds of fertilizer successfully. By the use of the GLASS FERTILIZER FEEDER we have overcome corrosion, rusting and clogging which have operated against similar machines. THIS GLASS FEEDER FEEDS.



The acids of the average fertilizer are very destructive to all metallic substances and cause corrosion and rust that soon eats out the feeding attachments. Glass is impervious to the action of moisture or acids of any kind. It endures—it lasts—it is always ready for use. You will find more about it in our catalog and circulars of our Buckeye Riding and Walking Cultivators, Buckeye Seeders, and other machines of merit. Send for them.

P. P. MAST & CO. 4 CANAL ST., SPRINGFIELD, OHIO. BRANCH HOUSE, PHILADELPHIA, PA.

THE RUMELY ENGINES & THRESHERS which represent the best of their kind. The engines are simple and compound, traction and portable. They range in horse power from 8 to 20, and are constructed of the best material throughout, having in view large traction power, easy steaming qualities, simplicity and durability. THE RUMELY SEPARATORS combine the apron and vibrator principle in one machine, which produces a separation of grain not attained by other machines. They are fast, clean, economic threshers 1897 catalogue mailed free. Write today M. RUMELY CO., LA PORTE, INDIANA.

FARMERS

Use, and Make Money Selling this Article.



Used on every shock. Pull and it's fast. Ties itself. Costs less than string. Never wears out. Thousands easily sold in a town. Good profits. Get your Town Agency now. Complete outfit for 5c., stamps.

Testimonials of Agents who have sold the

Holdfast Corn Binder.

"I sold over these three towns 8,000 Corn Binders." N. A. ELSINGER, Turner Centre, Maine.
"I expect to sell a good many Binders for you this season." ROBT. CRABBE, Vanderbilt, Pa. He sold 6,000 last season.
"Was your agent last year for Agawam, Mass., and Suffield, Conn. Would like the same this year. Every one liked them." E. F. NEWTON, Agawam, Mass. He bought 7,900 last season.
"Sold 5,500 Corn Binders in a short time. Believe I can sell many more than I did last season. From all who used them I get only words of praise." E. R. KEECH, Rockford, Mich.
"I sold 6,000 in small lots in this town. Can sell a good many more this season, as farmers have tried them, and know what they are." W. G. ST. JOHN, Hammon, N. J.

TIE CO., Box 54, Unadilla, N. Y.



"COSHEN" STEEL TANKS represent unsurpassed tank value. Are made of sheets of best annealed steel, heavily galvanized and thoroughly riveted together. They have heavy steel angles for top rim. These qualities go to make a tank that cannot burst from freezing, that cannot dry out or fall to pieces from hot weather; cannot rot or leak and will not rust. Mark you they are not stuck together with solder, they are riveted. Any capacity you desire. Descriptive circulars and prices sent on request. KELLY FOUNDRY & MACH. CO., 15 PURL ST., GOSHEN, IND.

STEEL



BETTENDORF AXLE CO. 442 W. FRONT STREET, DAVENPORT, IOWA.

FARMERS!

Don't waste time stacking straw, the **WIND STACKER**

Does it Better without manual labor. See that your thresherman is properly equipped, and give him timely notice.

A GENTLE BREEZE



MAST, FOOS & CO., Springfield, Ohio.

BRASS BAND

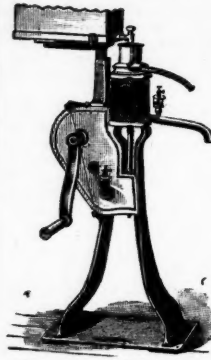
Instruments, Drums, Uniforms, Equipments for Bands and Drum Corps. Lowest prices ever quoted. Fine Catalog, 400 illustrations, mailed free; it gives Band Music & Instruction for Amateur Bands. LYON & BEALY, 50 Adams St., Chicago, Ill.

FOR SALE SECOND-HAND Material Such as Iron Roofing, Smooth Galvanized Wire, Water Pipes, Pig and Sheep troughs, Nails, Belting, Garden Hose, Sawn trough, and second-hand material of all description. Illustrated CATALOGUE FREE. Write CHICAGO HOUSE-WRECKING CO., W. 35th and Iron Streets, CHICAGO, ILL.

PATENTS R. B. WHEELER & CO.,

Solicitors of American and Foreign Patents. INVENTOR'S INSTRUCTION BOOK, FREE. Buhl Block, Detroit, Mich.

Reasons for their Faith IN THE Improved U.S. Separator



"It paid for itself the first year." S. W. RUSSELL, Highgate, Ctr. Vt. Jan. 15, 1897.
"Uncle Sam" gets all the cream every time." ALBERT DAVIS, Ea. Sullivan, N. H. May 3, 1897.
"The U. S. beat both the American and the De Laval." C. H. BENTLEY, Groton City, N. Y. May 22, 1897.

"The Improved U. S. was making us \$30.00 a month more than the creamery could." GARDNER & BLY, Ashville, N. Y., April 8, 1897.

More such—and the reason explained in our Catalogues—FREE.

We want agents where we have none.

Vermont Farm Machine Co., BELLows FALLS, VERMONT.



For all classes of buildings, easily applied, cheaper than shingles, will last a lifetime, and is absolutely fire and lightning proof. Reduces your insurance and is the best roof manufactured. Write for our handsome catalogue and mention this paper. SYKES IRON & STEEL ROOFING CO., Chicago, Ill., or Nine Ohio

THE CHARTER GAS AND GASOLINE STATIONARY ENGINES

1 1/2 to 35 actual H. P. STERLING TRACTION ENGINES 18 and 22 actual H. P. STERLING PORTABLE ENGINES 5 to 18 actual H. P. Charter Gas Engine Co., Box 318, Sterling, Ill.

Rife Hydraulic Engine

The most economical successful method of elevating water known. No cost of operation. Never stops. Pumps water by water power. Spring water delivered using muddy water as power.

RIFE ENGINE CO., 126 Liberty St., New York.

LOW Metal Wheels

with Wide Tires. Any size and width of tire wanted. Hubs to fit any axle. Saves labor. No resetting tires. Catalogue free. Address EMPIRE MFG. CO., Quincy, Ill.

THIS BEATS A DROUTH

No matter how dry the weather or what the crust is composed of, you can get a good well, every time, everywhere, with one of our STAR DRILLING MACHINES. They are better than others. Why? Listen—No springs, no cog gearing, longer stroke and more strokes per minute, truss rod axles, mounted on best wheels, boiler with flues in boiler waste, reverse link engine, 9 sizes. Full line tools, supplies. Send for free catalog. STAR DRILLING MACHINE CO., AKRON, O.



A Conscientious Farmer.

He lives in Indiana. After some one had persuaded him to buy another coiled spring fence, he satisfied himself that it infringed on the Page Company's patents. Then he wrote asking name a reasonable royalty, on payment of which he might be allowed to use it, and hereafter he will buy of the rightful owners.

PAGE WOVEN WIRE FENCE CO., Adrian, Mich.

The Peerless Fence Co.

The Peerless makes its own tension on both horizontal and cross wires and is the only absolute dead lock wire stay weaving device on the market. HOLLY, MICH.

CHURCH STEEL SPRING LOCK

Wire Fence and Gates. Have No. 7 Double Steel Pickets. Galv. Steel Lock that locks line wire to picket. Cannot Slip. Write for Free Sample, Circs. and Terms to Agents. The Church Manfg. Co., Box 425, Adrian, Mich.

BUGGIES! SEND FOR CATALOGUE "C" MONTGOMERY WARD & CO. CHICAGO...

When writing to advertisers please mention that you saw their advertisement in the Michigan Farmer.